Oil & Gas Bulletin
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Turkey: Gas license speaks volumes about Kurdish relations

Financial Times, *20.09.2013*

Turkey's energy market regulator EPDK awarded Turkish construction group Siyah Kalem a licence to import gas from Iraq 18 months on from the company's initial application.

The volumes are small – rising to a maximum of 3.2bn cu m per yr over the first 20 years out of a total 26 – but the fact it has been awarded at all speaks volumes about the state of relations between Turkey and Iraq, and the semi-autonomous Kurdish region of Northern Iraq. The long delay in processing the licence application follows the insistence by Turkish officials initially that Siyah Kalem should have concluded a signed and sealed contract with a gas supplier.

Subsequently Ankara announced that the licence would be also dependent on the approval of the Iraqi central government in Baghdad. Siyah Kalem has to date declined to name its potential supplier, but given Baghdad's continuing refusal to recognise oil and gas exploration licences signed by the Kurdish Regional Government (KRG) and its insistence that the KRG has no right export the region's mineral resources it's safe to assume the company has not received Iraqi approval. Which strongly suggests that Ankara may now recognise the KRG's claims that the Iraqi constitution does give it the right to export the region's oil and gas without approval from Baghdad. Such a move would not be not entirely surprising.

Ankara has long sided with the KRG in recurring spats over revenues for oil exported via the Kirkuk-Ceyhan pipeline, the Iraqi section of which is controlled by Baghdad. Since January it has allowed oil companies in the region to export crude oil by truck to terminals on Turkey's Mediterranean coast, in apparent breach of Iraqi law. Turkish officials have gone further, with energy minister Taner Yildiz last year suggesting publicly that oil from the region could be exported directly by pipeline to Turkey and carried by the Turkish section of the Kirkuk-Ceyhan line.

Turkey he said, could establish an escrow account to ensure that 83 per cent of the revenue from the sale of the crude returns to Baghdad in line with the Iraqi constitution, and the remaining 17 per cent goes to the KRG. Ankara had hoped that Washington would persuade Baghdad to accept the proposal and also sign off on Turkish plans for state oil company TPAO to partner Exxon in developing gas fields in the region.

However a visit to the US capital in May by Turkish Prime Minister Recep Tayyip Erdogan and energy minister Yildiz brought no such approval, furthering the sense of bitterness in Ankara that Turkey is still being pressed to reduce gas imports from Iran, but is not being allowed access to gas from northern Iraq to replace it.

Turkey's need for new gas supplies is not in dispute, even without reducing the 10bn cu m/yr it takes from Iran. Turkish gas demand is expected to exceed its total supply portfolio of 51.8bn cu m/yr within the next two years. The volumes Siyah Kalem proposes to import would provide some respite until 2019, when Turkey is scheduled to start receiving more gas from Azerbaijan.

However, as currently no pipeline exists to carry Siyah Kalem's gas and no project for such a line has yet been proposed, it is unclear when the gas could be made available, should Baghdad approve the export, or Turkey and the KRG decide to proceed anyway. Which raises the question as to why the licence has been issued, other than to increase pressure on Baghdad, and by implication Washington, to expedite a broader agreement covering the export of hydrocarbons from the Kurdish region.

Currently three oil pipelines are nearing completion inside the Kurdish region which will carry oil from three fields. Nominally all three will connect with the Baghdad-controlled Fishkabour metering station on the Iraqi section of the Kirkuk-Ceyhan line. However, the KRG is believed to be constructing its own metering facility close to the border with Turkey from where a short pipeline could connect with the Turkish section of Kirkuk-Ceyhan allowing crude to be exported from the region independent of Baghdad. Which facility the three pipelines actually connect to remains to be seen.

No one doubts that the oil reserves – and indeed gas reserves – in the Kurdish region will one day be exported via Turkey in considerably higher volumes than has yet been the case. The question remains though when and under what conditions those exports will commence, and, given the increasing unstable nature of the region what level of risk Turkey and the KRG are willing to take to make that happen.

Shah Deniz major sales agreements with European gas purchasers concluded

BP, *19.09.2013*

The Shah Deniz consortium announced today that 25-year sales agreements have been concluded for just over 10 bcma of gas to be produced from the Shah Deniz field in Azerbaijan as a result of the development of Stage 2 of the Shah Deniz project.

The Shah Deniz Stage 2 project is set to bring gas directly from Azerbaijan to Europe for the first time, opening up the Southern Gas Corridor. In total 16 bcma of Shah Deniz Stage 2 gas will be delivered through more than 3500 kilometres of pipelines through Azerbaijan, Georgia, Turkey, Greece, Bulgaria, Albania and under the Adriatic Sea to Italy.

Today's agreements for European gas sales follow the signing of agreements with BOTAS in 2011 to sell 6 bcma of gas in Turkey. "We are delighted that the years of negotiations led by SOCAR with multiple European companies have come to a successful conclusion. These agreements mark the biggest gas sales in the history of Azerbaijan. They also mark the beginning of direct links between Azerbaijan's huge gas resources and the European markets. Azerbaijan is committed to long-term cooperation with the Shah Deniz gas purchasers.

I am sure that this cooperation will bring benefits to consumers across Europe and will play an important role in strengthening European energy security," said Rovnag Abdullayev, President of SOCAR. Commenting on the agreements, Gordon Birrell, Regional President for BP in Azerbaijan, Georgia and Turkey, and President of the Operator of the Shah Deniz PSA, said: "The Shah Deniz consortium is proud to be involved in the conclusion of one of the biggest gas deals in the history of the oil and gas industry. On behalf of the Shah Deniz consortium, I would like to thank all the companies involved in these negotiations.

The deep cooperation that has led to the signing of these gas sales agreements sets the foundation for many years of partnership. The strong demand for Shah Deniz gas gives us confidence in the long-term development of Azerbaijan's gas resources. Today's signings represent another important milestone bringing us closer to a final investment decision on the Shah Deniz 2 project". The buyers who have today agreed to buy the gas are: Axpo Trading AG, Bulgargaz EAD, DEPA Public Gas Corporation of Greece S.A., Enel Trade SpA, E.ON Global Commodities SE, Gas Natural Aprovisionamientos SDG SA, GDF SUEZ S.A., Hera Trading srl and Shell Energy Europe Limited.

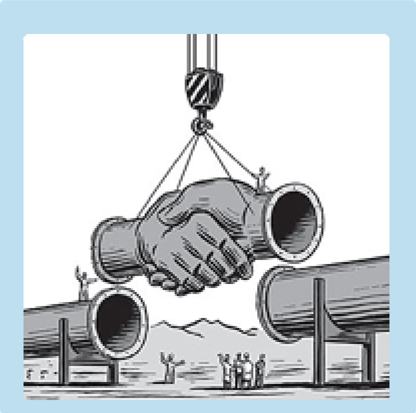
Of the total 10 bcma, around 1 bcma will go to buyers intending to supply to each of Bulgaria and Greece and the rest will go to buyers intending to supply Italy and adjacent market hubs. The completion of these agreements follows expressions of interest from many different companies for Shah Deniz gas and marks the completion of the Shah Deniz 2 gas sales process.

The gas sales agreements will enter into force following the final investment decision on the Shah Deniz Stage 2 project which is targeted for late this year. The Shah Deniz Stage 2 project will bring gas from the Caspian Sea to markets in Turkey and Europe, opening up the 'Southern Gas Corridor'. Shah Deniz Stage 2 is expected to add a further 16 billion cubic meters per year (BCMA) of gas production to the approximately 9 bcma from Shah Deniz Stage 1.

This Stage 2 development of the Shah Deniz field, which lies some 70 kilometres offshore in the Azerbaijan sector of the Caspian Sea, is expected to include two new bridge-linked production platforms; 26 subsea wells to be drilled with 2 semi-submersible rigs; 500 kilometres of subsea pipelines built at up to 550 metres of water depth; a 16 bcma upgrade for the South Caucasus Pipeline (SCP); and expansion of the Sangachal Terminal. The Trans-Anatolian Pipeline (TANAP) will transport gas across Turkey and the Trans-Adriatic Pipeline will transport gas from the Turkish-Greek border to Italy. The Shah Deniz co-venturers are: BP, operator (25.5 per cent), Statoil (25.5 per cent), SOCAR (10 per cent), Total (10 per cent), Lukoil (10 per cent), NICO (10 per cent) and TPAO (9 per cent).

Israel's plan to bring Greek Cyprus and Turkey together

Cyprus Mail, *20.09.2013*



Israel is quietly challenging Turkey and Greek Cyprus to make a choice recently: move together to develop Israel's share of the East Mediterranean's natural gas riches, or stay on the sidelines and perpetuate their decades-old stalemate over Greek Cyprus. Israel has stated its preference for export pipelines to both Turkey and Greek Cyprus, and is in a strong position to elicit both countries' cooperation to export its natural gas sources.

Only Israel has big proven reserves, while test drillings are still trying to establish whether Greek Cyprus has major exportable quantities.

Both fields are being developed by the same US and Israeli operating companies, who will make the main export decisions – subject, in the case of Israeli gas, to Israeli government permission.
Israel's strategy has steadily come into focus this year. In January, a top Israeli energy bureaucrat strongly hinted that Turkey is the natural anchor market for the gas. In June, the government committed to significant gas exports and said it could supply a Liquefied Natural Gas (LNG) plant outside Israel, with Greek Cyprus the only likely host.

Then, last week, Israel's energy envoy, Michael Lotem, put the pieces together. "An energy facility [to liquefy some Israeli gas exports in Greek Cyprus] has less complications than other options", he told energy executives at a conference in Paphos. This lent some support to the Greek Cypriots' cherished goal: a big, expensive LNG plant that could be a regional gas hub. But, Lotem added, "there is also a clear tendency not to put [all Israel's eggs in one basket] … positively, to have more than one energy destination".

That extra destination, Israeli officials and Turkish company representatives explained, is a pipeline that one or more Turkish companies are now vying to build from Israel's Leviathan gas field discovery to the Turkish coast. From there Israeli gas could feed into Turkey's national grid, or join the Trans-Anatolia Natural Gas Pipeline (TANAP) that Azerbaijan and others plan to build across Turkey, or even link up directly to the Trans Adriatic Pipeline (TAP) that European and Azerbaijani oil companies plan to build from Turkey's Greek border, across the Balkans, and on to Europe.

The offer looks elegant. The pipelines sidestep many of the chronic problems between Greek Cyprus and Turkey by simply forking on the seabed. A shorter western arm would go to Greek Cyprus, and a longer northern arm would go to Turkey. One Israeli official suggested 4-5 billion cubic metres of gas goes to Greek Cyprus as soon as possible, and some 8-10 billion cubic metres a year goes to Turkey when that pipeline is financed and built.

There is a hitch, of course. The pipeline to Turkey would have to go through the internationally recognised Exclusive Economic Zone (EEZ) of Greek Cyprus. Theoretically, under the UN Law of the Sea, a pipeline builder does not need formal permission to build through an EEZ. In practice, to do so without permission would be unthinkable (although some voices from Turkey, counter-productively, threaten just that). The Israeli plan would certainly help the atmospherics of the Greek Cyprus problem. The two sides have failed to negotiate almost any confidence-building measure for years.

While some Turkish and Greek Cypriot officials and businessmen would welcome an Israeli-prompted breakthrough, that outcome is far from certain. Greek Cypriot officials rule out any possibility of allowing a pipeline to Turkey through their EEZ, at least before a settlement of the Greek Cyprus dispute, for which a new round of talks is expected to start in October. And there is no sign yet that Turkey's mercurial, anti-Israel Prime Minister, Recep Tayyip Erdoğan, would approve a pipeline that might help Israel.

Yet Turkey will obviously lose out if Israeli gas goes elsewhere. And if Greek Cyprus does not allow the pipeline to pass through its EEZ to Turkey, Israeli officials say Israeli gas will probably not go to the Greek Cypriot LNG plant either. Israel is making clear it doesn't want to be pulled onto one side or the other of the frozen Turkey-Greek Cyprus conflict. "What [feels] good in the short run may have a high price in the long run," Ambassador Lotem told the Paphos conference, adding that gas exports should be used to bind Israel, Turkey and Greek Cyprus closer for regional peace. Continuing with the old zero-sum calculus, he warned, could leave "zero for some".

This dilemma is particularly acute for the pragmatic Greek Cypriot leadership elected in February. Greek Cypriot media and nationalist politicians are notoriously reluctant to allow Turkey any advantage. In the bitter politics of the Greek Cyprus dispute, both parties have long chosen to punish the other on questions of nationalist principle, even at great cost to themselves.

Yet without Israeli gas, the economics of any Greek Cypriot LNG plant would be in grave doubt, at least until exploitation of Greek Cyprus' own natural gas fields proves to be economic. Greek Cyprus can't afford the wait. After bad Greek debts and mismanagement crushed its banking system and economy in March 2013, and with most shops on its capital's main fancy shopping street dusty and shuttered, Greek Cyprus desperately needs a positive story, economic growth and cash to repay the emergency funds with which the European Union bailed it out.

With a choice this tough, and with their inexperience in energy development decisions becoming more evident by the month, Greek Cypriot officials may simply delay. But there's another reason Greek Cyprus doesn't have long to dither: the Israelis want an answer by early next year, and are already looking at other, admittedly less easy, options, like an LNG plant of their own, even one moored out at sea. If this happens, Israel's natural-gas export route may prove yet another lost opportunity for Greek Cypriots, Turkish Cypriots and Turkey to find a way out of their labyrinth.

Turcas offers Israel to build pipeline

Hürriyet Daily News, *16.09.2013*

Turcas Holding has submitted a $2.5 billion offer to Israel for the construction of a 470-kilometer pipeline between Israel and Turkey. Turcas Holding has offered Israel, which has started to discover considerable amounts of natural gas in the eastern Mediterranean, to build a pipeline under the sea from Israel to Turkey's southern province of Mersin.

A member of the board, Mathew Bryza announced the offer worth $2.5 billion during an energy conference held in Greek Cyprus. Byrza, a former American diplomat, said the 470-kilometers-long pipeline would have a capacity to transfer 16 billion cubic meters of natural gas a year.

He also stressed that if the political problems between Turkey and Israel affected the construction, all cost and responsibility would be assumed by Turcas. Besides, Israeli daily Globes said Turkey's Zorlu Group was also in talks with Israel for pipeline building and buying natural gas. Globus said Zorlu, which was constructing a power plant in the Ashkelon province of Israel, contacted the companies that had shares in Israel's natural gas region Leviathan and made offers for buying natural gas and constructing a pipeline. Israel's government in June approved limiting natural gas exports to about 40 percent of the country's newly-discovered offshore reserves. Two of the world's largest offshore fields found in the past decade lie in Israeli waters. Tamar, with an estimated 280 bcm, was discovered in 2009, and a year later Leviathan was found, with an estimated 530 bcm.

Genel signs landmark KRG gas supply deal

Oil and Gas Eurasia, *20.09.2013*

A landmark agreement has been signed by Genel Energy and partner DNO International that will see the first commercial gas supplied from the KRG of Iraq. The agreement is for around 100 mln cubic feet of gas per day from the Summail field in the Dohuk licence.

Gas produced will be sold on a take-or-pay basis for the duration of the PSC or until deliveries reach one trillion cubic feet. The price of gas will range between $3 and $4 per thousand cubic feet over the life of the contract. Prime Minister of KRG Nechirvan Barzani, Dr. Ashti Hawrami, were both signatories to the deal.

The gas will help displace diesel currently used to generate electricity in a 500 MW power plant in the city of Dohuk, 40km from the Summail field. Bijan Mossavar-Rahmani, DNO International's executive chairman, said: "We are pleased to be the first to sign a commercial gas sales agreement with a state buyer in KRG". "Development of Summail is a win-win as we contribute to lowering fuel costs in local power generation while growing and diversifying the company's production and revenue base."

Tony Hayward, Genel's chief executive added: "The signing of the first domestic gas sales agreement in KRG is a significant milestone in the development of the gas industry in the KRG of Iraq and the first step in Genel's gas monetization strategy." DNO expects first gas from Summail-1 in January 2014. A second well, Summail-2, will spud in the fourth quarter of this year while the Summail-3 well is scheduled for 2014. Norwegian firm DNO International holds 40% and operates Dohuk. Genel has another 40% and the KRG the remaining 20%.

Iraqi Kurds seek funds from oil companies for Syria refugees

Reuters, *15.09.2013*

KRG has asked oil companies operating in the autonomous region for $50 million to help deal with an influx of refugees from Syria that has put a strain on its resources. Around 200,000 refugees, many of them from Syria's own Kurdish minority, have poured into the self-ruled enclave in northern Iraq since the start of the conflict more than two years ago.

The number of refugees crossing monthly into KRG surged to more than 40,000 in August after opposition forces fighting to overthrow Bashar al-Assad made incursions into the country's northeast, where many Kurds reside.

"Given the huge scale of the crisis and the number of refugees arriving daily we all need to work together to provide more urgently needed help," KRG's minister for natural resources, Ashti Hawrami, said in a statement. KRG pledged to match contributions from the oil industry dollar-for-dollar.

In recent years, KRG has signed lucrative contracts on its own terms with oil majors such as ExxonMobil and Chevron Corp, antagonizing the Iraqi central government, which claims sole authority to manage the country's crude. A near 10-fold increase over the past 12 months in the rate of refugees crossing Syria's borders into Turkey, Iraq, Jordan and Lebanon pushed the total living abroad above 2 million earlier this month, the United Nations said.

Gulf Keystone starts commercial production, ramp up on track

Reuters, *19.09.2013*

Gulf Keystone, fresh from winning a court battle over its ownership of oil assets in KRG, said commercial production started and was on track to rise to 20,000 barrels of oil per day (bopd) by the end of 2013.

The company said on Thursday that oil output from its Shaikan field, its prize asset from which it aims to produce as much as 150,000 bopd in the next three years, reached 12,400 bopd in early September and would continue to ramp up to 20,000 bopd by the end of the year. Posting a loss of $26.4 million in the half-year period, Gulf Keystone said the ramp up in production would help it generate steady revenues.

The company said it was working hard on its goal to move from the London Stock Exchange's Alternative Investment Market to the main market, which it is also targeting by the end of 2013.

Genel Energy announces update on Tawke

Rebuildingiraq.net, *18.09.2013*

Genel Energy notes that DNO International, as operator of the Tawke Field in the KRG of Iraq, has today issued the following statement on the field.

Shares in the company, which had been temporarily suspended ahead of the ruling, soared as much as 26 percent when trading resumed. DNO announced today that it has commenced extensive testing of the Tawke-23 exploration well in the KRG region of Iraq. The well is the second horizontal well drilled by the Company in the Tawke field and has encountered continuous oil shows within a 930 metre horizontal section in the main Cretaceous reservoir.

The test program, expected to last up to three weeks, will focus on ten fracture zones with production potential. The Company's first horizontal well in the field, Tawke-20, tested 8,000 barrels per day from each of ten producing intervals in the Cretaceous reservoir and is currently on stream at an average rate of 25,000 barrels per day. Also currently drilling in KRG are two other Tawke horizontal development wells, Tawke-21 and Tawke-22."

Greek – Azeri gas deal to be mutually beneficial

Oil and Gas Eurasia, *17.09.2013*

Greece will become the first European Union country to receive natural gas from Azeri reserves through the so-called South Stream, i.e. the Trans Adriatic Pipeline (TAP), according to the head of the Azeri state-run firm SOCAR, Rovnag Abdullayev.

In a rare interview to foreign media, the SOCAR president confirmed that negotiations between his company and Greek gas company DEPA about the natural gas quantities Greece will acquire from the Shah Deniz II reserve and at what price have been completed, with an agreement set to be signed in the Azeri capital of Baku within the next 10 days.

Israel's Supreme Court's hearing on gas exports postponed

Natural Gas Europe, *19.09.2013*

Decision to export around 40% of the newly found gas and preserve 60% of the gas at home was taken earlier on 23 June this year. The decision dictates that sales to Israel's immediate neighbors, Jordan and the Palestinian authority would come out of the allocation for exports.

The decision attempted to find a compromise between on one hand the recommendation of the Tzemach committee to export half of the gas and on the other hand the concerns of the public and some of the political organizations to ensure Israel had enough gas to become and remain energy self-sufficient for years and years to come.

The conservative approach reflected Israel's long history of energy dependence, relying mainly on Egypt for natural gas supplies and suffering from numerous disruptions due to attacks on the pipeline connecting to the countries. Between keeping all the gas at home and exporting a large proportion, a balance had to be found. Oil and gas companies involved in the development of Israel's hydrocarbon wealth need an incentive to continue their search for gas and transform the country into an energy producer.

Sales revenues would ensure such a motivation is maintained and would constitute a serious motivation for oil and gas explorations to go on. New revenues in billions would also substantially boost the country's economy by improving the employment market, allowing the realization of national projects of all kinds and constituting a hedge against balance of payment fluctuations. Members of the Parliament and various political groups were still not satisfied with the decision and contested its legitimacy before the Supreme Court of Justice.

They argued that the importance and weight of the stakes involved should require the involvement of the Knesset. The hearing on the petition, originally scheduled for 17 September, was postponed to 20 October. A seven-member panel will be hearing the case including Supreme Court President Asher Grunis. The uncertainty around the outcome of the hearing frustrates investors and in particular the Australian giant Woodside that signed last December a memorandum of understanding with Noble, Delek, Avner Oil and Gas and Ratio Oil Exploration to acquire a 30% stake in the Leviathan licenses for USD 1.25 billion.

The deal had been due to close in February but was delayed on several occasions, initially pending a government decision on gas exports, and then by the Supreme Court's consideration of appeals against it. Despite such delays, Israel is still a step ahead compared to its neighbors. Greek Cyprus is in the process of confirming the quantities of gas believed to be found in the Aphrodite field in the Island's Block 12. Results of the appraisal drilling are expected in a couple of weeks.

The island is also building the pillars of its LNG facility in Vassilikos that would allow it to export natural gas from Aphrodite and other potential fields within its EEZ. Greek Cyprus also hopes to realize its ambition of becoming an energy hub by attracting gas from neighboring Israel and Lebanon for processing and transiting. Lebanon, still without a fully functional cabinet, is struggling to launch its exploration phase. Despite significant interest in its resources expressed by international oil and gas companies through their high level of participation in the pre-qualification round, the country is going through episodes of instability as a result of the civil uproar next-door in Syria.as only one LNG plant in the Far East, now controlled by Gazprom, which liquefies gas from the Sakhalin-2 project and has an annual capacity of around 10 million tons.

A source familiar with the document said on Tuesday that the proposal would allow LNG exports by companies that hold licenses to build LNG plants, or to send the gas for liquefaction to a plant determined by the government. The source also told Reuters that the draft proposed allowing LNG exports by companies with state holdings of at least 50 percent - if they send LNG abroad from offshore fields or from production-sharing agreements. The Russian authorities previously planned to open up LNG exports from 2014, with a requirement that Novatek's and Rosneft's projects would ship gas to Asia only and not challenge Gazprom's exports to Europe.

Gazprom, despite having agreed on cooperation with the China National Petroleum Corp (CNPC) in 2004, has yet to finalize terms on piping gas to China. The $20 billion Yamal LNG project being developed by Novatek, France's Total and China's CNPC is scheduled to start producing LNG in 2016 with a view to supplying 16.5 million tons of the tanker-shipped fuel by 2018. Rosneft's planned LNG plant in Russia's Far East involves Exxon, has an estimated cost of $15 billion and a production target of 2018. The Energy Ministry declined immediate comment. Under an existing 2006 law, Gazprom, the world's top gas producer, is the only company allowed to ship gas out of Russia. Gazprom had earlier said it had discussed the possibility of supplying LNG to China from a planned plant near the Pacific port of Vladivostok.

Israel: The macroeconomic benefits of gas discoveries

Natural Gas Europe, *16.09.2013*

For over 65 years, Israel had been energy dependent relying on expensive energy imports to satisfy its domestic needs. The lack of energy security put Israel in a very precarious position. Things promised to change dramatically when substantial discoveries off Israel's coast put the country on its path towards energy independence and possibly becoming a gas exporter.

The Tamar reservoir, a discovery made by Noble Energy in 2009 and containing a gross resource estimate of 10 tcf, came online in April this year. Tamar contains enough gas to supply Israel's domestic demand for decades.

There The Leviathan, twice as big as Tamar, is expected to come online in the next few years and will allow the country to become a net gas exporter. Noble Energy announced in March 2013 the results from its second Leviathan appraisal and estimated the gross mean resources of the field at 18 trillion cubic feet (Tcf). The estimate was later increased to 19 Tcf. The newly found gas will contribute tremendously in allowing the country to shift from expensive heavy-fuel products to a cleaner and cheaper energy source. Israel's vision to increase the share of natural gas in its energy portfolio started back in 2000.

Natural gas constituted 16% of its energy portfolio by 2009. Today, 40% of Israel's energy supply comes from natural gas. The proportional increase led to a reduction in CO_2 emissions in the country and added 1% to Israel's GDP this year. Geo-political obstacles might stand in the way: the maritime disputes in the region, the rapidly changing energy markets and the complicated export routes needed for Israel to export its gas. There is however no question that Israel will be better off with its hydrocarbon wealth than without it. Exporting the gas will generate billions of revenues, significantly boosting the economy.

Drilling and exploration activities require a significant human capital. The employment market will benefit directly through oil and gas jobs and indirectly through the supply of goods and services to the industry. The market will see a decline in energy prices and enjoy a reliability of supply. Tax revenues will no doubt fill the state's coffers with billions of shekels that could be allocated to finance domestic projects such as infrastructure, education, defense and health. Additionally, exporting the gas will create a substantial inflow of foreign exchange that will hedge an eventual fluctuation in the balance of payments. Israeli officials believe that revenues from the Tamar and Leviathan fields could reach up to USD 130 billion by 2040 (or 2% of the GDP). Improving the trade balance is also a major positive consequence not to be neglected: exporting the gas will increase the value of Israel's exports.

Israel is definitely convinced that the new riches will improve the shape of its economy on various levels. Debates on where to spend the money are already on-going. Some might say that it is burning the steps to discuss how to spend cash that has not yet been made at a time when Israel is still debating export quotas and the legitimacy of export decisions in front of the High Court of Justice. Export routes, markets and means are yet to be decided. The constantly changing energy markets and the complicated geopolitics of the region will certainly keep us interested for a while.

EU and Russia reach 'political deal' on OPAL gas pipeline

EurActiv, *17.09.2013*

EU and Russia have agreed a deal on the use of Germany's OPAL link to Gazprom's Nord Stream gas pipeline, a Russian energy ministry spokeswoman said yesterday. No one from the European Commission, the EU executive, was available for immediate comment on the deal, which ends months of talks on OPAL, which runs from the offshore section of Nord Stream through Germany to the Czech border.

A deal could help to ease tensions between Russia and the European Union, although the bigger issue of the European Commission's competition investigation into Gazprom remains unresolved.

"The ministry and the EU have reached an agreement on the OPAL pipeline. The agreement is to the satisfaction of both sides. They aim to sign the deal by the end of October," a Russian spokeswoman said. Two EU sources, speaking on condition of anonymity, said a working party meeting had reached a political deal, which still needed legal endorsement. Neither the Russian ministry nor the EU sources disclosed details and would not say whether Russia was getting the full access to the pipeline that it had been demanding.

Relations between Russia and the EU have been soured by Brussels' efforts to introduce more competition to the energy market and reduce Russian dominance of the bloc's gas supplies. Gazprom's access to the 470-kilometre OPAL pipeline has been limited because of the EU's Third Energy Package legislation, which aims to prevent firms that already dominate supply from also controlling distribution networks.

Nabucco seeks to rise again

Natural Gas Europe, *17.09.2013*

The Nabucco West pipeline would appear to be dead. Rejected in favor of the Trans-Adriatic Pipeline by the Shah Deniz consortium back in June, with the consortium's website down and with consortium shareholders reading the last rites, the once-mighty project is surely buried forever.

But Nabucco shows signs of rising, Lazarus-like, from the grave. Taner Yildiz said that the pipeline from the Turkish-Bulgarian border to Austria is "still on the table" and could be realized in the future. He cited new supplies of gas due to come from northern Iraq and growing demand within Europe as signs that TAP would not, ultimately, be sufficient.

Yildiz is not the only one trying to revive Nabucco at the moment. His Azerbaijani counterpart Natig Aliyev, speaking the day after Yildiz, said that the projects "have different goals and the choice of TAP does not exclude implementation of Nabucco". He said that if Azerbaijani gas production increases as anticipated, there will be a clear opportunity to build Nabucco in the future. Bulgarian President Rosen Plevneliev also said in July that Sofia would continue working for the project's implementation. Given that Turkey has just expressed its intention to buy into TAP, how to explain this support for a rival pipeline which was supposedly finished?

To be sure, this line isn't new. Even before the Shah Deniz consortium made its choice, a chorus of voices pointed out that the decision did not mean that the losing project would not be built in the future. But the interest expressed by Yildiz and Aliyev suggests that there is a genuine effort to ensure that Nabucco does not disappear entirely. For Turkey, the requirement to expand the Trans-Anatolian Pipeline would provide a proportionately bigger opportunity to take gas supplies for domestic consumption, as well as enhancing its position as a gas corridor to Europe.

For Azerbaijan, Nabucco would help to fulfill its long-stated desire of making inroads into the Balkan market. Although TAP will deliver this through the planned Ionian-Adriatic Pipeline, an additional route would enable more widespread and reliable Azerbaijani gas supplies across southeastern Europe. Although the Shah Deniz consortium undoubtedly chose the most commercially viable route, there were certainly aspects of Nabucco which some of the stakeholders preferred. Azerbaijan's SOCAR, in particular, is less constrained by the bottom line than the Western consortium members, and remains determined to pursue its Balkan ambitions:

Aliyev, for instance, said that "If demand in Europe increases, direct access to south-eastern European countries would be good". And for Bulgaria, Nabucco would give it more direct access to Caspian gas, more than it would get through Balkan interconnectors or the reversal of Greek gas pipelines. The 1-2bcm/year which Bulgaria expects to get from TAP will not, realistically, allow it to diversify away from Russian gas, through current routes or South Stream. Serious questions remain about aligning the latter with the EU regulations and, facing serious domestic unrest, Sofia is keen to avoid politically or financially expensive options.

The level of continued support for Nabucco illustrates that the original rationales for the project remain intact. This does not presuppose that anyone is changing their mind on TAP. As a financially astute, flexible pipeline TAP is the leader, and was chosen for very good reasons. But in the old formula of Heydar Aliyev, “happiness is multiple pipelines”: in the long run TAP will not fully satisfy either Azerbaijan’s rising gas output, Turkey’s energy hub ambitions, or Bulgaria’s diversification efforts.

The obvious question is – will it get built? After the long saga which culminated in the TAP decision in June, nobody has much appetite for new investment in Caspian gas pipeline projects. However, the Southern Corridor was always intended to be sequential in nature, with new infrastructure expected as gas output in the Caspian and elsewhere increases over the coming 10-15 years. Azerbaijan’s gas output alone is expected to rise to 54bcm by 2020, according to the government, up from what BP estimated was 15bcm in 2012 (less optimistic forecasts expect production of 34.8bcm in 2020). Minister Aliyev has been bullish, suggesting that forecasts for Shah Deniz Phase 2 production of 16bcm are “very pessimistic” and that up to 20bcm could be expected.

Even accounting for a significant rise in domestic consumption from the current 8.5bcm, and small exports to Iran and Russia, the more optimistic scenario will leave anywhere between 15 and 35bcm available for export from Azerbaijan; with northern Iraqi gas also expected to enter the equation, and TAP only able to carry 20bcm at maximum, there is very likely to be scope for new infrastructure. So it might seem unlikely now, but Nabucco might just live to see another day – perhaps when memories of recent events aren’t quite so fresh.

Russia to export LNG

Oil and Gas Eurasia, *19.09.2013*

A bill that would allow independent producers to export LNG has been written and submitted to the president’s administration for approval by the Ministry of Energy. The bill effectively destroys Gazprom’s monopoly on exporting LNG abroad, which has been in effect since 2006.

There will be two cases in which it will be possible to obtain the rights to sell LNG directly, without making an agency agreement with Gazprom. First, exporting rights may be granted to users of mineral resources who have a license to build a plant or send the produced gas for liquefaction at one of the government-allowed plants.

Secondly, companies and their affiliates will be allowed to export LNG if they are more than 50 percent government-owned. However, such companies will only be able to liquefy and ship abroad gas that is from Russian offshore fields. Products manufactured from gas produced under production-sharing agreements can also be exported. So far, the only plant under the control of Gazprom that produces liquefied gas in the Russian Federation is Sakhalin-2, which has a capacity of 10.8 million tons (about 5 percent of the global LNG market).

Iraq’s new five year plan to diversify economy beyond oil

Reuters, *20.09.2013*

Iraq’s government has released a five-year economic plan which will try to diversify beyond oil production and develop the industrial sector. The plan, announced this week, faces major obstacles including a rising level of sectarian violence and political infighting within the country’s fractious coalition government.

But if implemented, it could mark a new stage in Iraq’s recovery from decades of war and international economic sanctions. So far, the recovery since the United States invasion of 2003 has been based almost entirely on rising oil production.

“The government made a decision to focus on other sources in the country instead of oil, so the new plan will basically focus on industry instead of oil,” said Hussain al-Shahristani, deputy prime minister for energy affairs. The plan for the years 2013 to 2017 calls for investment of approximately $357 billion in development projects across the country, focusing in particular on five sectors: building and services, agriculture, education, transport and communications, and energy.

About 79 percent of that investment total would come from the government and the rest from the private sector. Oil would remain by far the biggest source of revenue for the government during this period. Revenues from oil in the five years are projected at 768.7 trillion dinars ($662 billion), with revenues from non-oil sources at 43.5 trillion dinars. Production of crude oil is envisioned rising from 3.2 million barrels per day in 2012 to 9.5 million bpd in 2017, with crude oil exports climbing from 2.6 million bpd to 6 million bpd in 2017, assuming an average oil price of $85 per barrel over the five years.

Many analysts think such targets may be much too optimistic, given logistical bottlenecks and the damage which the sectarian violence is doing to oil production and government operations. Iraq aims to increase its storage capacity for crude oil for export from 10.987 million barrels to 30.057 million barrels in 2017. The five-year plan also envisages increases in agricultural production to reduce Iraq’s dependence on grain imports.

Chevron inches closer to Ukraine shale deal

Upstream Online, *20.09.2013*

Ukraine's government on Friday moved closer to a new shale gas deal for the country when a regional council approved its draft for a production-sharing agreement with Chevron.

Deputies in the western Ivano-Frankivsk region had sent the draft back to the government a month ago, pressing for guarantees that the environment would be adequately protected during exploration and for a commitment to allocate 10% of any gas produced for local consumption. Interfax news agency said on Friday deputies had voted 62-to-1 in favour of an amended government draft, with 11 abstentions.

"This is an absolutely positive outcome," Fuel Minister Eduard Stavitsky told Reuters by telephone. The approval of a second council in the neighbouring Lviv region is required before the government can go ahead and sign an agreement with Chevron. "Ivano-Frankivsk has given its go-ahead for the project. Now it's the turn of Lviv," Stavitsky said. Anglo-Dutch supermajor Shell has already signed a $10 billion deal for shale exploration and extraction at the Yuzivska field in the east of the ex-Soviet republic.

The Kiev government sees shale gas development as important for easing its dependence on costly gas imports from Russia which weigh heavily on its economy, Reuters reported. But deputies had expressed concerns over the ecological consequences of shale exploration in the mountainous forest region which is known for tourist resorts. Fracking has sparked opposition from environmentalists elsewhere in Europe who fear it could pollute underground water.

Stavitsky told Reuters the deputies demand for 10% of the gas to be earmarked for local consumption had been met. "The condition about the 10% was agreed," he told the news agency. Apart from shale gas exploration, Ukraine is hoping to find alternative energy sources through offshore exploration and liquefied gas deliveries from other foreign suppliers.

China's Yamal involvement sends interesting signals

Natural Gas Europe, *20.09.2013*

When CNPC farmed into the Yamal Liquefied Natural Gas project obtaining a 20% interest it added colors to the ostensibly non-feasible Arctic project. And when a pool of Chinese banks agreed to participate in financing this project the Liquefied Natural Gas venture of Novatek and Total became even more interesting to watch.

The Chinese have never made a mistake in their slow but assured penetration into the Russian oil and gas industry. The tactic was to wait for a good opportunity in ambush and then jump out and make an offer the Russians could not refuse.

They did it in 2004. Rosneft accepted a loan of $6 bln from Chinese banks to pay for assets of dismembered Yukos (nobody else would have agreed to help the Russian government-owned company to buy 'stolen goods' at that time.) The friendly assistance fetched China a lucrative contract for oil supply at reportedly soft prices. They did it again in 2006. Rosneft wanted to take over Udmurtneft, a producing unit of TNK-BP, but had no cash to pay for the asset. Sinopec was allowed to buy it after promising to cede a controlling interest to Rosneft, to be paid for out of future revenues.

It was really a coup because very few people in Moscow liked the idea of a Chinese company running an upstream asset in the heart of Russia. And they did it in 2009, when $25 bln from Chinese lenders saved Rosneft from bankruptcy and enabled Transneft to complete the ESPO pipeline—and Chinese oil consumers received guarantees for another 20 years of uninterrupted oil supply from Russia. It would be naïve to assume that Beijing is entering a feebly justified project on the Yamal Peninsula without a hidden goal in mind. After all, there are much closer and warmer locations of gas production available to China, with cheaper LNG in them.

The project of Novatek, Total and CNPC still faces a big snag because it is already a potential threat to Gazprom, which remains a sacred cow to the Russian leadership. Yamal LNG cannot send its production directly to China and other Asian markets because the northeastern passage in Arctic waters is not navigable for more than four months a year.

Defying Vladimir Putin's direct orders not to obstruct Gazprom's trade, the initiators of the project have shortlisted Dunkirk in northern France and Zeebrugge in Belgium as a transshipment facility for reloading LNG from ice-class shuttle tankers to larger ones on their way to Asia, but 'transshipment' seems to be just a pretext. Gas from Yamal will evidently be offloaded in Europe - even if a swap scheme is employed with suppliers to Asia—and compete with Gazprom's contracts for pipeline deliveries.

The Chinese may be driven by anticipating a dramatic change in the attitude of Moscow toward Gazprom and its gas export monopoly. Or they may be seeking even the slightest opportunity to get a toehold in Arctic, considering the huge potential of the area as a source of oil and gas and as a short route of global trade. Whatever the real rationale of the involvement, the activity of Beijing in the north or Russia sends interesting signals to other investors and policy makers.

How Europe would benefit from Russia's investments in Iraq

Natural Gas Europe, *19.09.2013*

This summer Russian energy giants Gazprom Neft, Lukoil, and Rosneft signed new contracts in Iraq's southern fields, which are controlled by Baghdad's federal government, as well as in the northern fields controlled by Erbil's KRG. Gazprom even announced in July that the oil investments would soon be followed by similar activity in the natural gas field.

If so, Iraqi gas could join the Trans-Anatolian gas pipeline and create a price concurrence with Azeri gas, which would be a major change for European consumers looking to multiply their suppliers with the southern energy corridor.

This year in February, Gazprom Neft signed its third contract with the KRG, adding to Russia's already sizeable portfolio in both the KRG and the Baghdad-controlled Iraqi south. Since 2012, Gazprom Neft has penetrated the KRG's Shakal and Garmian blocks. Moreover, in February 2012, after a visit to Moscow by Massoud Barzani, the KRG's president, Gazprom Neft signed a contract to develop the Halabja block. Russian investment in Iraq gained new momentum this summer after the visit of central and regional government authorities to Moscow and St Petersburg.

The first visit occurred in June by a high-level representatives group from the KRG. It consisted of President Barzani, Falah Mustafa (head of the KRG's foreign relations), and Hersh Muharam (head of the Investment Board of the KRG), all of whom met Gazprom's chairman Alexei Miller in St. Petersburg. The second visit came in July from Iraq's federal authorities, a group led by Iraqi Prime Minister Nuri al-Maliki and Iraqi Oil Minister Abdul Karim Luaibi. Those talks were held in Moscow with Russia's second-largest oil producer, Lukoil OAO Holdings. Both visits had oil in their agenda and ended with resolutions strengthening Russia's presence in Iraq.

Even though Maliki's visit followed the visit of the KRG's president, international media did not report any announce from Iraqi authorities about Russian investments being in jeopardy due to continued work in the KRG. Presumably, Baghdad authorities considering the Kurdish deals illegal because of the lack of legislation regulating oil and gas revenue sharing nevertheless do not oppose Gazprom Neft and Lukoil revenues in the KRG.

Despite Iraq’s juridical gap creates tensions between the regional and federal governments and increases the vulnerability of energy investments, international oil companies have begun to question their presence in the country. This summer, a Gazprom spokesman made a new announcement after meeting with Barzani: “in particular, the parties discussed the progress with interaction in oil and gas field exploration, development and operation“. Rosneft has also joined this gas interest group and Rosneft’s CEO Igor Sechin told reporters in August that the company is considering teaming up with its long-standing partner, ExxonMobil, to tap oil and gas in Iraq.

In addition to 143.10 billion barrels in oil reserves (the sixth-largest in the world), Iraq has also large natural gas reserves, mainly located in the northern territories controlled by the KRG. Kurdish authorities estimate their reserves at 2.8 trillion cubic meters–making them the eleventh largest supply in the world and larger then Azerbaijan’s Shah Deniz gas fields’ reserves.

If Rosneft achieved its objective of exploiting Kurdish gas in partnership with ExxonMobil the presumable export road would be Europe via Turkey by using the southern energy corridor, which consists of the Trans-Anatolian gas pipeline and the Trans-Adriatic gas pipeline infrastructure. Economically, the exploration and production costs for oil and gas in the Caspian Sea Basin still remain high compared to costs in the Middle East. Consequently, the joint American-Russian move would create for European consumers a chance to multiply suppliers in the southern energy corridor.

Additionally, this project might rebuild Russia’s internal market dynamics, improving Rosneft’s position in its battle with its rival Russian state-owned corporation, Gazprom. Rosneft has already announced its objective to increase its share of the domestic gas market from 9 percent to 19-22 percent by 2020 and to produce more than 40 billion cubic meters of gas in 2013, to reach over 60 by 2016 and to hit 100 billion cubic meters by 2020.

But Rosneft is not alone in the Kurdish gas market. This week the Istanbul-based Siyahkalem Engineering Construction Industry and Trade was issued a license, valid for 26 years, to import natural gas from northern Iraqi territories to Turkey. This will no doubt raise competition in the European market and improve market condition for European consumers.

Gazprom acquires new licences in Tajikistan

Natural Gas Europe, *20.09.2013*

Russia's Gazprom intensifies its operation in Tajikistan, obtaining an extension of its licenses in the Western Shaambary and Sarykamysh areas for a five-year period. 'Besides, the parties agreed that Gazprom would soon receive licenses for new prospects in Tajikistan,' reads a note of the company, referring to the Gazprom's delegation and the Government of the Republic of Tajikistan.

Alexey Miller, Chairman of the Gazprom Management Committee, met Emomali Rachmon, President of the Republic of Tajikistan, to discuss the two-way interaction in the energy sector.

'Alexey Miller and Emomali Rachmon expressed confidence that the cooperation between Gazprom and Tajikistan in the energy sector had a great potential and was particularly important for enhancing the economic ties between the two countries,' reads the note. The cooperation between Gazprom and the Government of the Republic of Tajikistan hinges on the long-term Agreement on Stategic Cooperation which, signed in 2003, will expire in 2028.

Transneft says CPC ready for Kashagan only in March – April

Reuters, *20.09.2013*

The Caspian pipeline (CPC) will be ready to get commercial oil flows from the newly launched Kashagan oilfield only in the spring, a senior official at Russia's oil pipeline monopoly said on Friday, suggesting an alternative route for the oil.

"We are counting on receiving Kashagan's oil in commercial volumes through the CPC likely in March-April," Mikhail Barkov, Transneft's vice president, told Reuters, adding that meanwhile Transneft's Samara pipeline could serve as an alternative. He has said that the expansion programme of the CPC, where Transneft is a shareholder, is behind schedule by up to a year.

India’s Iran oil imports far below levels last year trade

Reuters, *19.09.2013*

India’s imports of Iranian oil shot up in August to more than four times the volume taken in July as one refiner resumed purchases after a four-month break, but the average annual pace of shipments is still far below last year’s levels.

India’s intake of Iranian oil to date in 2013 is down over 40 percent on the year because international sanctions aimed at curbing Tehran’s nuclear programme have made it difficult to insure refineries and ships involved in the trade and forced some oil payments to be made in rupee. Even though Indian oil minister M. Veerappa Moily says he wants Iranian oil imports near last fiscal year's rate of 260,000 bpd.

He says it would save $8.5 billion in foreign exchange and help curtail India’s current account deficit - daily shipment rates are much lower than that. Industry sources also told Reuters there would likely be no great import resurgence despite the government putting together a new reinsurance package for refineries processing Iranian oil. India imported 151,000 bpd of Iranian crude in August versus 35,500 bpd in July, when only Essar Oil bought from Tehran, data compiled by Reuters from trade sources shows. Iranian oil imports in August were about a fifth less than last year’s 192,000 bpd, the tanker arrival data shows. Imports for January-August dropped about 44 percent from a year ago.

Other data provided by industry sources and Reuters calculations indicated that Indian imports from Iran will run about 190,000 bpd in the year to end-March 2014. The U.S. and EU sanctions aimed at forcing Tehran to negotiate an end to its nuclear programme have more than halved its oil exports from about 2.2 million bpd and cost it billions of dollars a month in lost oil revenue. Western powers believe Iran is developing nuclear weapons, while Iran says its programme is for power generation. U.S. President Barack Obama may meet with Iranian President Hassan Rouhani next week after a “change in tone” between Iran and the West since Rouhani took office.

Only two refiners - Essar Oil and state-owned Mangalore Refinery and Petrochemical Ltd - bought Iranian oil in August. MRPL, which used to be Iran’s top Indian client, bought its first oil from the sanctions-hit nation since April, the data shows. MRPL resumed the imports after securing local reinsurance for claims up to 5 billion rupee ($79 million). In addition, India is planning to provide a 10 billion rupee sovereign guarantee to back local insurance for refineries using Iranian oil.

The government guarantee is half of a package that would assure refiners running Iranian oil of about 20 billion rupee in insurance coverage. An earlier plan of twice the amount had been considered, but a finance ministry official said the government felt the smaller package was adequate, declining to give further details. With the new fund, local insurers will remove the sanctions clause from the policies covering the refiners.

MRPL and another state refiner, Hindustan Petroleum Corp Ltd , had halted Iranian oil imports in April, primarily over the insurance issue. However, as they waited for the government plan to shore up the local insurers, some refiners determined that there are suitable substitutes for Iranian crude. HPCL, for instance, has significantly raised imports of Iraq's Basrah oil to replace its lost Iranian barrels, and is not switching back this fiscal year. "In our crude import strategy for this year we have not factored in Iranian oil imports," said an HPCL source.

Iran was ninth biggest crude oil supplier to India in August, improving its ranking from 15th place in July, but that was still down from sixth a year ago. India imported about 52 percent more oil from Latin America in the first eight months of the year as its Iranian shipments dropped. Crude imports from Iraq over the same period increased nearly a quarter. Overall, Asia's third-largest economy shipped in 26 percent more oil in August than a year ago, while imports for the January-August period rose about 12.4 percent, the data showed. India and other buyers of Iranian oil - including China, Japan and South Korea - can win exemptions from U.S. sanctions by continually lowering their purchase volumes. India will be up for review of its six-month exemption in December.

Announcements & Reports

► *IEA Key World Energy Statistics (2013)*

Source : International Energy Agency
Weblink : http://www.iea.org/publications/freepublications/publication/KeyWorld2013_FINAL_WEB.pdf

►*Yemen Country Analysis Brief*

Source : Energy Information Administration
Weblink : http://www.eia.gov/countries/analysisbriefs/Yemen/yemen.pdf

► *Electric Power Monthly (July 2013)*

Source : Energy Information Administration
Weblink : http://www.eia.gov/electricity/monthly/pdf/epm.pdf

Upcoming Events

► *Global Gas Opportunities Summit* ***(in Turkey)***

Date : 1 – 3 October 2013
Place : Istanbul – Turkey
Website : http://www.fleminggulf.com/conferenceview/Global-Gas-Opportunities-Summit/209

► *21st Kazakhstan International Oil & Gas Exhibition and Conference*

Date : 1 – 4 October 2013
Place : Almaty – Kazakhstan
Website : http://www.kioge.com/2013/upstream2013.html

► *22nd World Energy Congress*

Date : 13 – 17 October 2013
Place : Daegu – South Korea
Website : http://www.daegu2013.kr/eng/index.do

► *Deep Offshore Technology International Conference & Exhibition*

Date : 22 – 24 October 2013
Place : Texas – USA
Website : http://www.biztradeshows.com/trade-events/deep-offshore-technology.html

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► *EIF International Energy Congress and Fair* ***(in Turkey)***

Date : 24 – 25 October 2013
Place : Ankara – Turkey
Website : http://www.enerjikongresi.com/en/

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► *The Economist European Energy Summit* ***(in Turkey)***

Date : 30 – 31 October 2013
Place : Istanbul – Turkey
Website : http://cemea.economistconferences.com/event/european-energy-summit#.UfJAK40vlbF

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► *15th CIS Oil and Gas Transportation Annual Meeting* ***(in Turkey)***

Date : 30 October – 1 November 2013
Place : Istanbul – Turkey
Website : www.theenergyexchange.co.uk/cispipes

► *Gas to Power Turkey 2013* ***(in Turkey)***

Date : November 2013
Place : Istanbul – Turkey
Website : http://www.biztradeshows.com/trade-events/world-shalegas-exhibition

► *World Shale Gas Conference & Exhibition*

Date : 4 – 7 November 2013
Place : Texas – USA
Website : http://www.biztradeshows.com/trade-events/world-shalegas-exhibition

► *Abu Dhabi International Petroleum Exhibition and Conference*

Date : 10 – 13 November 2013
Place : Abu Dhabi – UAE
Website : http://www.adipec.com/page.cfm/Link=1/t=m/goSection=1

► *European Unconventional Gas Summit 2014*

Date : 28 – 30 January 2014
Place : Vienna – Austria
Website : http://www.theenergyexchange.co.uk/event/european-unconventional-gas-summit-2014#tab-country1