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Energy Charter Head: Russia-Turkey to lead stability of energy trade

AA Energy Terminal, *06.07.2016*

Given the importance of Turkey and the Russian Federation to each other in energy trade, normalizing relations will hopefully lead to increased stability of energy trade and transit, according to the secretary general of the Energy Charter.

Secretary General Urban Rusnak spoke that "I welcome the announced normalization of trade relations between Turkey and the Russian Federation. Both sides have to restore their mutual confidence through gradual improvement of trade and cooperative relations in less complex issues first, and this is a critical step in that direction," Rusnak said.

According to Rusnak, energy cooperation is extremely complex and requires long preparation and even longer realization of projects and, stability and dialogue is critical to beginning the process. "Given the importance of Turkey and the Russian Federation to each other in energy trade, normalizing relations will hopefully lead to increased stability of energy trade and transit," he said.

He said that this could also have positive repercussions for the greater region, including even energy transit projects to the EU. "As far as Turkish Stream is concerned, I think any speculation is premature now," Rusnak added.

The Energy Charter Treaty has 54 members including EU states, non-EU Eastern European, Central Asian states, Japan and Australia. Turkey has been a signatory of the treaty since 2001. Alexey Miller, CEO of Gazprom, announced that Putin had canceled the construction of the South Stream Natural Gas Pipeline in December 2014. Putin laid the blame on the European Union for axing the project.

After terminating the project, Putin announced that Russia's state gas company, Gazprom, would build a 63 billion cubic meter (bcm) capacity natural gas pipeline to Turkey, bypassing Ukraine and naming the project the Turkish Stream.

The Turkish Stream aims to transfer Russian natural gas to Europe via Turkey. However a lack of progress in the project was put down to Russia's non application of the 10.25 percent gas price discount to Turkey's gas contract with Russia which was previously agreed on. After the Russian jet downing, both Turkish and Russian officials made statements about freezing talks on the Turkish Stream project.

Following the November 2015 downing of the Russian warplane in Turkish airspace, the Kremlin ordered sanctions on food products, an end to visa-free travel, and a ban on Russian tourists taking package holidays to Turkey.

Turkey's President Recep Tayyip Erdogan sent a letter to his Russian counterpart calling for the restoration of "traditional friendly ties,". After that Putin called Erdogan and the two leaders discussed bilateral relations and cooperation on regional issues and humanitarian crises. During the conversation, Erdogan and Putin emphasized the importance of normalizing relations between the two countries.

Israel-Turkey-Russia cooperation to bring Turkish Stream back

AA Energy Terminal, *05.07.2016*

Turkish Stream pipeline project may be on table soon if energy cooperation between Israel, Russia and Turkey intensifies, David Livingston, an associate with the Carnegie Endowment for International Peace in London said.

Livingston told Anadolu Agency that the recent detente between Russia and Turkey caught Washington by surprise, though in structural terms it should not be unexpected: both countries need one another for a mix of political, economic, and energy reasons. "Russian sources close to the Kremlin are signaling a renewed openness to the prospect of a Turkish Stream pipeline.

I anticipate we will be hearing Turkish Stream (or a similar trans-Turkey pipeline) discussed more often in the weeks ahead, regardless of whether or not the four lines initially envisioned actually make economic sense," Livingston said.

He added that for Russia, raising the credibility of Turkish Stream makes Russia seem less dependent Nord Stream II being approved, although in reality this remains the case. "There is significant untapped capacity in Russia's gas fields that could be used to feed Turkish Stream.

This capacity is partially being tapped to feed gas to domestic consumers in the Krasnodar region, but there remains significant volumes that could be brought online fairly quickly," he noted. Livingston reminded that another interesting development is the detente between Israel and Turkey that has taken place in parallel.

He noted that in early June, Israeli PM Netanyahu traveled to Moscow and personally told Russian President Putin that he invited Russia to develop Israel's gas fields. "Israel may also be a good candidate to purchase Gazprom's gas volumes that are currently being sold to Poland under a contract that expires in 2022," he said.

"If energy cooperation between Israel, Russia, and Turkey intensifies - and I do believe there is indeed some compelling economic logic to support this - it would mean that discussions over Turkish Stream are not going away anytime soon," he added.

Ben McPherson, principal editor at the European Geopolitical Forum, a Brussels-based think tank, emphasized though it's just a small, initial step, this sign of thawing relations can only be a good thing for regional stability and energy security. However, McPherson said that he is hesitant to predict new progress regarding Turkish Stream.

"From the beginning, the Turkish side, particularly their companies, attempted to use Turkey's position to secure substantial discounts on gas imports from Gazprom. BOTAS, for instance, was seeking a 10.25 percent discount on their contractual price, and negotiations were going badly enough that things were completely stalled and BOTAS was turning to arbitration proceedings," he reminded and noted that these disagreements over discounts, as well as questions regarding the infrastructure to deliver the gas onward through southeast Europe, precluded any real progress on the project.

Fixing the broken

Daily Sabah, *03.07.2016*

Well, it seems to have finally happened: Turkey and Russia made up. The surprise development happened President Erdoğan gave Russia in writing his regrets over Turkey's downing of a Russian military jet, which created an unprecedented crisis in Turkish-Russian relations.

Following up on this, in a matter of days Russian President Putin volunteered a phone call to President Erdoğan that and was "open and positive." Apparently the two heads of state had a lot to discuss after a break in communication during which Turkish-Russian relations were on stand-by, war mongering was on and mutual hostility on the rise.

All these months Russia waited in anticipation for Turkey to render its apology for a notorious accident with MIG-25 that resulted in the death of a jet pilot, whom the Russians have nearly made a national hero. Russia's reaction to President Erdoğan's words of regret was clear and immediate: without ado, the letter was accepted by President Putin as a long expected apology to create the solid ground for making peace between Turkey and Russia.

The Kremlin takes the recent development as the beginning of a relations restoration process that is due "to turn over a crisis page of bilateral relations and launch a renewal of joint international and regional efforts as well as to upgrade Russian-Turkish relations as a whole."

Turkey has made up its mind as well and developed its own road map envisaging in a step-by-step approach to bring relations back to normal. As such the bilaterally launched process may well turn into a lengthy and not an easy-going development. No doubt, damage to Turkish-Russian relations was inflicted and it'll take time to bring things back to normal. It remains to be seen, how fast a once flourishing partnership is restored, since a lot of effort is required. A personal meeting of two presidents is an immediate priority and hopefully it won't have to wait long.

It’s been announced that it’ll take place in September in the course of the G20 Summit in China. As of now, the foreign ministers of Turkey and Russia are meeting on July 1 in Sochi to discuss immediate mutual initiatives and arrangements. They are facing a demanding task of approximating the positions of Turkey and Russia in order to build the ground for the fullest possible restoration of once fiduciary relations between these two countries.

It will unlikely be a smoothly going and fast process. Russian society is far from unanimous about immediately restoring the country’s relations back to their pre-crisis level. Opinions of the Russian political elite differ from the tough rhetoric of hardliners to the soft stance of the liberal-minded minority. Still, President Putin’s stance in support of an instant restoration of Turkish-Russian relations has been expressed loud and clearly to make it a guideline for Russia to pursue, and this is no doubt.

The Turkish tourism sector suffered the most from the Turkey-Russia confrontation, both putting the hotel business on the Mediterranean on the verge of bankruptcy cost and depriving millions of Russians from spending their annual vacation at the shores of the warm seas.

The share of Russian tourists among all the visitors in Turkey shrank from 13.2 percent to 1.65 percent during the past year. In appreciation of this situation and straight after the phone conversation with President Erdoğan, President Putin instructed the Russian authorities to remove all restrictions on travels to Turkey imposed on the national travel agencies after the November accident. Commendable as it is, this move will hardly generate an immediate positive effect due to its timing: summer has nearly half gone.

Turkish-Russian trade relations will benefit as well and Turkish imports to Russia will experience a boost while meeting the Russian market demand in seasonal vegetables and fruit, and miscellaneous commodities. In comparison with the beginning of 2014, Russian imports from Turkey were registered as 75 percent less in May 2016.

Restrictions will be removed as well from Russia’s construction sector that was subjected to heavy red tape and additional bureaucracy in regard to Turkish contractors at the beginning of the year. Turkish contractors traditionally topped the list of foreign contractors in Russia back since the 1990s and accounted for an impressive share of 20 percent of the construction workload in the beginning of 2015. As well, they may well now expect a comeback of the visa-free regime put on stand-by in January 2016.

The energy sector will be a prime beneficiary. The spokesman from the all-powerful Gazprom didn’t wait long to announce his company’s anticipation of a resumption in negotiations over the Turkish Stream construction abruptly put on stand-by by the jet crisis last November.

“Gazprom is and has always been open for a dialogue on the Turkish Stream,” the TASS Russian news agency quoted him as saying. The Kremlin voiced a less optimistic forecast of the situation around the Turkish Stream development. According to Kremlin spokesman Dmitry Peskov, “it’s too early to resume talks about in which direction the Russian gas will go.” Well, so far so good, but it’s not as simple as it may seem at a glance. The seven-month stand-by in relations has generated new trends and has established new priorities for Turkey and Russia.

In the process of living under sanctions for a few years by now, Russia has managed to foster development of certain national productions and even sectors that have remained underdeveloped since beginning of the 1990s.

The process was triggered by the EU sanctions imposed in 2014 and it motivated Russia's government to support local producer instead of relying heavily on imports. Russia claims to have got rid of its dependence on imports by two thirds and the process continues to go on. This is a relatively new reality that has to become a focus of attention for Turkish producers coming back to the Russian market after more than half a year.

On the other hand, the severing of relations with Russia has motivated Turkey as well to adhere to certain damage control measures in the energy sector. For years concerns have been expressed about reducing Turkey's overdependence on deliveries of Russian gas and recent sad developments in Turkish-Russian relations revealed that the worst scenarios could come true.

In response to the newly emerging realities, Turkey acknowledged its plans to reduce within the next few years its electricity generation from imported natural gas, from nearly 50 percent to less than 40 percent. The initiative falls well in line with the active development of wind and solar alternative sources of energy to produce the necessary energy carriers mix to counter balance overdependence on Russian natural gas.

Still, Turkey and Russia are natural partners due to their geographic location and close links with their neighbors in the Middle East, the Caucasus and the Black Sea region. They are tied by organic bonds and are deigned to cooperation. The newly launched process of restoring damaged relations will definitely enrich them with certain elements that are still due to surface in the nearest future.

Damnus: Private sector key to Israeli exports to Turkey

Natural Gas Europe, *04.07.2016*

After the "win-win" agreement between Turkey and Israel, energy relations may take time to bear fruit, Nusret Comert, the chairman of Damnus Energy, told NGE. Comert, who has over 30 years of experience in the global gas industry, is an expert on relations in the eastern Mediterranean. He talked about the recent rapprochement between Israel and Turkey, as well as between Russia and Turkey.

"Israel gas may ship to Turkey in three years time, but steps need to be taken by private sector companies in both Israel and Turkey," Comert said, who headed Shell Turkey over ten years.

“The agreement between two countries will form the basis for expanding energy relations between the two countries. However, politicians will not waste more time with talking, which may postpone investment decisions as well as blurring the political environment,” Comert said.

He believes the pipeline could feasibly be constructed within three years, especially given the short distance from Turkey to the Israeli reservoirs. Damnus, his own company, has had talks with Israeli and Turkish investors for investing in the offshore pipeline. Delek Group and Noble Energy are the key energy companies with investments in the eastern Mediterranean. “These two companies must be quick to realise the offshore gas pipeline project,” he said.

According to his estimates, an offshore pipeline to Turkey may cost between $3bn and $4bn. He also said that Botas, Turkish state owned pipeline operator, had to be involved in the offshore pipeline project.

Last month, Israeli oil and gas companies reached an agreement with the Israeli government on an amended stability clause of the Natural Gas Policy Framework. The original stability clause, which was struck down by Israel’s Supreme Court in March, aimed at protecting the partners from regulatory changes for ten years. The amended version allows for future governments to consider regulatory changes; however, these changes would commit the government to favourably consider a compensation mechanism for the benefit of the oil and gas partners.

Comert said that restoring economic relations between Russia and Turkey may take time, after Turkey’s president, Recep Tayyip Erdogan, expressed regrets to his Russian counterpart Vladimir Putin for the death of the Russian pilot whose plane was shot down over Turkish airspace last November. Two leaders held phone call on June 30, as part of the political rapprochement.

Also, Turkish foreign minister Mevlut Cavusoglu and Russian foreign minister Sergei Lavrov talked in Sochi, Russia during the Black Sea Economic Summit. Both ministers said that the relations in energy would strengthen from now on. “Russia will be cautious, and try to restore energy relations gradually. The shelved pipeline project, Turk Stream, can be discussed between the two countries. But it will take a long time before that front bears fruit,” Comert told NGE.

SOCAR talks up Turkey's TANAP gains

Natural Gas Europe, *05.07.2016*

The BP-led consortium developing the giant Shah Deniz gas and condensate field offshore Azerbaijan has the obligation to deliver 2bn m³/yr to Turkey from the field's second phase (SD2) in mid-2018. "That year, the total gas supply amount agreed is 2bn m³," State-owned Socar told NGE.

The expected start date is July 2018. Socar is the operator of the Azerbaijan Gas Supply Company (AGSC), which sells gas produced in Shah Deniz on behalf of consortium partners. The following year supply will be 4bn m³, gradually increasing within three years from the beginning of export to 6bn m³ when SD2 is at plateau.

The gas supply to Turkey will be executed under the contract signed in 2011 between Shah Deniz partners and Botas by Trans Anatolian pipeline (Tanap). The annual reserved capacity of Tanap held by AGSC starts at 6.1bn m³/yr in the build-up period and reaches plateau of 10.5bn m³/yr after 18 months. According to Socar, the gas transportation agreement with Tanap provides 100% ship-or-pay condition on the capacity reservation.Tanap's fee will yield payments to Turkey of $5.95/'000 m³ of annual capacity booked.

The company's general director Saltuk Duzyol told Turkish paper Hurriyet that tariffs for transportation will be $70/'000 m³. "The Turkish state-owned gas pipeline operator Botas will get 30% of this payment," he said.

But it is not only a matter of money, tariff and taxes. "Turkey will not only gain income from Tanap, it will provide an alternative energy supply source and lessen the nation's dependence on Russian gas," he said. Turkey will also continue to receive gas from SD1, Socar said, or about 6.6bn m³/yr until 2019.

Israel's reconciliation with Turkey could lead to new energy deals

Foreign Policy, *01.07.2016*

Israel and Turkey agreed to normalize diplomatic relations Monday, six years after an Israeli raid on a Turkish aid ship sent to Gaza opened a bitter divide between two Mediterranean countries that had long been friendly.

And while shared security concerns were apparently the biggest driver of the rapprochement, the deal could potentially pave the way for Israel to use its abundant reserves of natural gas to become a major energy supplier to Turkey in the years. The reconciliation announced by Israeli and Turkish officials marked the culmination of years of informal talks ushered along by the EU and by U.S. officials.

Speaking to reporters in Rome, Israeli Prime Minister Benjamin Netanyahu stressed the "strategic importance" of the deal, especially at a time of deepening insecurity across the eastern Mediterranean. The five-year old civil war in Syria continues apace, while terrorist attacks have hammered both Turkey, and to a lesser extent, Israel in recent months.

"Energy diplomacy has been crucial in lubricating the relationship and giving them a non-controversial platform for contacts in recent years, but I think the reconciliation is definitely about security," said Brenda Shaffer, a Georgetown University expert on the region.

Under the terms of the deal, Israel will pay Turkey $20 million in compensation for the victims of the 2010 raid, but it won't lift the naval blockade on Gaza. Turkey, for its part, will ship aid to Gaza through Israel, rather than unilaterally, and promised to ensure that Hamas only carries out political activities on Turkish soil, rather than plotting attacks against Israel.

After the governments in Israel and Turkey ratify the final agreement, the two sides will exchange ambassadors and unwind some economic sanctions. That will pave the way for greater security and intelligence cooperation. For Turkey, reconciliation with Israel comes not just as the region is unraveling, but while Ankara's ties to other once-close friends have frayed.

Turkish relations with Russia went into a nosedive last year after Turkish jets shot down a Russian bomber that briefly crossed into its airspace. That chilled ties between the two, hammered Turkish tourism and trade, and put Turkish-Russian energy projects on ice.

Turkish President Recep Tayyip Erdogan apologized to Russian President Vladimir Putin for shooting down the jet, and indicated that Ankara is ready to normalize relations with Russia. For Israel, and especially for Netanyahu, healing the breach with Turkey has been a primary objective for years, but has gained urgency as the Syrian crisis continues to worsen.

The prime minister spoke of Monday's reconciliation as creating "islands of stability" around Israel; since Turkey shares a border with Syria, closer cooperation between Israel and Turkey could help minimize the fallout from the civil war and the terrorist petri dish it has created.

But for Netanyahu, restoring normal ties with Turkey could also bring an economic benefit: a potential new market for Israeli energy exports. Late last year, the Israeli prime minister pressed the case for exporting Israeli gas — rather than keeping it all for the domestic market — by touting the geopolitical benefits of energy exports. One of the prizes he flagged? Closer ties with Turkey.

Netanyahu again emphasized Israel's hoped-for role as a supplier of natural gas to neighbors around the region, including Turkey, as well as to countries in Europe. The reconciliation, Netanyahu said in joint remarks with Kerry, "has also immense implications for the Israeli economy – and I use that word advisedly – immense implications for the Israeli economy, and I mean positive immense implications."

The prime minister said that Israeli gas, especially at the large Leviathan field off the Israeli coast, could supply enough energy for domestic use as well as exports to Egypt, Turkey, and European countries desperate to find suppliers other than Russia.

Israel has already explored some deals to sell gas to neighbors like Egypt and Jordan. But there are technical and commercial obstacles to big gas deals with Turkey. Building a pipeline in the deep waters of the Mediterranean would likely be very expensive, as would building a terminal to ship gas by tanker.

At the same time, the world is awash in natural gas right now, and Turkey has increasing options to meet its future energy needs, including piped gas from countries like Iran and Azerbaijan, as well as gas from the Middle East or the United States shipped by tanker. At any event, Shaffer said that future gas deals between Israel and Turkey would underscore that peace, stability, and good relations are generally the precursors of the energy trade, not the result. "It's not that pipelines bring peace, but that peace brings pipelines," she said.

Israel gas may flow to Turkey via Turkish Cyprus

Hurriyet Daily News, *04.07.2016*

The need to transport natural gas found off of Israel to EU markets was one of the main motivations for the normalization deal between Israel and Turkey.

The numbers tell that the gas factor was more of a pushing factor for Israel than it was for Turkey. It seems that gas from Israel will provide middle term source-diversification for Turkey, besides the more important political meaning that will come with economic interdependence. An Israeli source told that the total reservoir of the Leviathan and Tamar gas fields was estimated to be around 900 billion cubic meters (bcm), some 150 bcm of which is planned for exports.

“That could bring in important revenue for the Israeli economy,” the source said. “But because we have not been able to find ways to reach the markets, companies have not yet been able to invest enough to develop the fields further.”

Nevertheless, two companies - Noble and Delek - are the major contractors for exploration, drilling and production of gas from the two fields. The Israeli authorities have found that selling the gas through a pipeline to be constructed to Turkey would be the most feasible way to do this.

There is an EU study on carrying the gas to Cyprus, then onto either the island of Crete or mainland Greece, since the Greek Cypriot government wants to export gas from its own fields. Feasibility studies show that building Liquefied Natural Gas (LNG) plants for naval transportation would not be profitable.

A Cyprus-Greece route would need to construct a pipeline of more than 1,100 km, which would pass through the open Mediterranean Sea, partly at depths of 3,000 meters. On the other hand, a pipeline from Israeli gas fields to Turkey’s oil and gas terminal of Ceyhan would mean a pipeline of just 485 km through the relatively shallow waters of the East Mediterranean.

In this case, the Israeli-Turkish gas pipeline will have to pass through the economic maritime zone of the Turkish Cypriot government. “This may upset our Greek Cypriot friends, but this is an important economic project for us and we have to be rational. This is the shortest route,” my Israeli source said. But there is still another option, as considered by Israeli planners.

Depending on the future of ongoing talks between the Greek and Turkish governments on divided Cyprus, a pumping station could be built on the island to collect both Cypriot and Israeli gas and deliver it to Turkey through a single pipeline. Girne, on the northern shores of Turkish Cyprus, is around 100 km from the Turkish industrial port of Mersin, which is another 120 km from Ceyhan. The southern shores of Turkish Cyprus are only 200 km away from Israeli gas fields.

Such a possibility would increase both the economic and political value of the gas exports, since it would depend on good relations between the political authorities on both sides of Cyprus. Once a reunification deal is reached in Cyprus, the gas fields in the Greek south and the Turkish north of the island could be used for the good of both communities.

The U.S. has been pushing hard for a Cyprus deal under the auspices of the United Nations, as well as a deal between Turkey and Israel - its two main allies in the East Mediterranean and the Middle East.

The diversification of gas resources for Turkey and the EU means less gas being bought from Russia. Every cubic meter to be bought from Israeli and Cypriot fields (and Egyptian, too) would be subtracted from Russian exports.

On the other hand, if Turco-Russian normalization process proceeds further, the Russians could reactivate the new South Stream project to sell gas to EU markets via another pipeline through Turkey and the Turkish economic zone in the Black Sea, in order to meet the increasing demand in Europe.

Will all these projects manage to help bring about a solution to the civil war in Syria, which borders both Israel and Turkey, and which has the heavy involvement of Russia, the U.S. and Iran? For that, we will have to closely monitor how Turkish-Russian normalization evolves.

Israel's Harel to buy Tamar gas field stake from Noble

Reuters, *05.07.2016*

Harel Insurance Investments and Financial Services (HARL.TA) and the Israel Infrastructure Fund (IIF) are to buy 3 percent of the Tamar natural gas field from Texas-based Noble Energy (NBL.N) for $369 million.

Noble owns 36 percent of the Tamar field, which was discovered in the eastern Mediterranean in 2009 with reserves of 10 trillion cubic feet. It began production in 2013 and now fuels more than half of Israel's electricity generation. Under a deal reached with the Israeli government to boost competition in the sector, Noble agreed to trim its stake in Tamar to 25 percent.

The company said on Tuesday it expects to sell 7 to 8 percent over the next three years. Noble and its Israeli partner Delek Group (DLEKG.TA) control a number of natural gas fields off Israel's coast, including the much larger Leviathan field. Delek has agreed to sell its entire 31.3 percent stake in Tamar. Harel and IIF have an option to buy another 1 percent of Tamar for $123 million, Harel, which is the largest investor in IIF, said in a statement.

The deal is based upon a pre-tax Tamar valuation of $12 billion and is subject to purchase price adjustments between Jan. 1 and the closing date, which is expected in the third quarter, Noble said. After-tax proceeds are expected to be $275 million.Gary Willingham, Noble's executive vice president of operations, said the deal highlighted the potential of its other undeveloped Levant Basin discoveries, which share similar characteristics. Noble will be entitled to royalties if the Tamar partners sign an export deal with Egypt by the end of 2016. The deal is conditional on regulatory approval.

Noble and its partners are planning to drill an additional development well at the Tamar field in response to increased demand for natural gas in Israel as the country replaces coal. Drilling is expected to begin in the fourth quarter.

"These proceeds further bolster our balance sheet in the near term and will contribute to our upcoming capital investments in Israel, including our initial investment in the Leviathan project," Willingham said. The Tamar field sold 252 million cubic feet per day of natural gas and generated pre-tax income of $318 million for Noble in 2015.

India is cutting oil deals worldwide

Bloomberg, *08.07.2016*

In May, shortly before he spoke to Congress in Washington, Indian Prime Minister Narendra Modi traveled to Tehran to sign a deal with the leaders of Iran and Afghanistan to develop a port on the Gulf of Oman, with India providing $500 million in financing.

"Iran has prioritized expanding relations with those states that stood by its side when it was under sanctions," Tehran-based political analyst Mostafa Khoshcheshm said on Iranian state television in May. India, though pressured to buy less oil from Iran, stayed close to the country during the sanctions.

The port deal strengthens ties between Iran and India, which accounted for almost a third of Iran's oil exports in March. The prime minister is looking north, too. India's largest oil company, state-owned Oil & Natural Gas Corp. (ONGC), completed a $1.3 billion purchase of 15 percent of Vankor, one of the biggest Russian oil fields to go into production in the past 25 years.

Three other companies—Oil India, Indian Oil, and Bharat Petroleum's Bharat PetroResources—on June 17 agreed to buy 23.9 percent of Vankor. The rest is owned by Russia's top oil company, state-controlled Rosneft. The Indians aren't finished. Indian companies are considering buying a stake in Rosneft itself, Dharmendra Pradhan, the country's oil minister, told reporters in New Delhi on June 23. With Indian investment in Russian oil projects reaching up to $6 billion, strong bilateral relations "will ensure India's energy security for a long term," he said. By taking stakes in overseas projects, India also ensures local companies benefit from the money spent on imported oil and gas.

For Modi, securing a reliable supply of oil and gas is a “foreign policy priority,” says Ashok Sharma, an international-relations fellow at the University of Melbourne’s Australia India Institute. India “can’t afford not to focus on energy security.”

The previous government had similar goals, but Modi has made them a higher priority, says Dhruva Jaishankar, a foreign policy fellow at Brookings India, a New Delhi-based affiliate of the Brookings Institution. “You have seen the government be very aggressive,” he says.

Demand for oil is growing faster in India than anywhere else. It jumped 400,000 barrels a day in the first quarter, to 4.4 million barrels, accounting for almost 30 percent of the increase in worldwide consumption, the International Energy Agency said in May.

Driving that thirst is India’s growing car market: Domestic vehicle sales rose 5.6 percent in the year ended in March, to more than 20 million, helping propel a 14.5 percent increase in gasoline purchases. The IEA expects the country to account for 25 percent of global demand from 2013 to 2040.

India imports more than three-fourths of its oil and about 40 percent of its gas, putting pressure on the rupee and the trade deficit. By 2022, Modi wants to reduce import dependence by 10 percent, so he’s offering attractive terms to foreign companies to drill off India.

“Entrepreneurs who have capped their wells in Alberta or North Dakota will be looking at this kind of story with a greater amount of interest,” says Atanu Chakraborty, head of India’s oil-regulating Directorate General of Hydrocarbons. Even so, the country still needs imports. “India just doesn’t seem to be blessed, or cursed, with large deposits of oil and gas,” says Brookings India’s Jaishankar.

Modi has hunted for deals in Saudi Arabia, the United Arab Emirates, and Qatar. Energy security was on the agenda when he visited Mozambique on a trip scheduled for July 7. Indian companies including ONGC, Oil India, and Bharat Petroleum own 30 percent of a gas field off of Mozambique.

Lead developer Anadarko Petroleum, a Texas-based exploration company, says the field has the potential to make Mozambique the world’s third-largest exporter of natural gas. Indian companies have already spent as much as $6 billion on it. State-owned gas distributor Gail India in April became the first Asian company to buy shale gas from the U.S. By 2018, India will be importing about 6 million metric tons of U.S. liquefied natural gas annually.

Saudi Arabia's oil reserves: How big are they really?

Reuters, *05.07.2016*

"How much oil lies beneath the desert sands of Saudi Arabia and how long will it last before running out?" is a question that has intrigued and confounded oil experts for five decades.

The kingdom has proven reserves of 266 billion barrels according to government estimates submitted to the Organization of the Petroleum Exporting Countries ("Annual Statistical Bulletin", OPEC, 2015). If these numbers are correct, Saudi Arabia's reserves will last for another 70 years at the average production rate of 10.2 million barrels per day reported for 2015.

But there is widespread scepticism about the official estimates, which were abruptly raised without explanation from 170 billion barrels in 1987 to 260 billion in 1989. Official reserves have remained constant every year since then at 260-265 billion barrels, even as the country has consumed or exported another 94 billion barrels ("Statistical Review of World Energy", BP, 2016).

If the government data is accurate, the kingdom has managed the remarkable feat of exactly replacing each produced barrel with new discoveries or increased estimates of the amount recoverable from existing fields. But most of the country's giant and super-giant oil fields were discovered between 1936 and 1970 and no comparable discoveries have been made since then.

The implied increase in reserves must therefore come from enhanced estimates of the amount of oil recoverable from existing reservoirs. The problem is that field-by-field production profiles and reserve estimates are state secrets known by only a small group of insiders, making it impossible to test or verify them.

Analyzing Saudi reserves and trying to predict when the kingdom's production will begin to decline has been a graveyard for the reputation of professional oil analysts. The kingdom is currently producing more oil than ever before, defying predictions that its output would peak and then fall ("Twilight in the desert", Simmons, 2005).

The oil industry employs a number of different ways of classifying the amount of oil available for future production. The broadest category is the total amount of original oil in place (OOIP) in the reservoir formation before production began. In the 1970s, there was broad agreement that the OOIP of Saudi Arabia's discovered oil fields was around 530 billion barrels. The estimate for original oil in place was reported to the U.S. Senate's Subcommittee on International Economic Policy by executives for Arabian-American Oil Company (Aramco). Aramco was then jointly owned by four U.S. oil companies (Exxon, Texaco, Socal and Mobil) as well as the government of Saudi Arabia so its owners and executives could be required to testify.

The subcommittee report, now nearly 40 years old, contains some of the last detailed information about Saudi reserves in the public domain (“The future of Saudi Arabian oil production”, U.S. Senate, 1979).

But not all of the original oil in place can be produced technically or profitably so most analysts focus on a series of narrower measures which look at the amount of technically and economically recoverable reserves. Proved reserves, the most conservative and prudent measure, are those which are estimated to exist, and are technically and economically recoverable, with a probability of at least 90 percent.

Probable reserves are those estimated to exist and be commercially recoverable with a probability of at least 50 percent. Possible reserves, the most speculative and optimistic measure, are estimated to exist and be commercially recoverable with a probability of at least 10 percent.

In the late 1970s, Aramco put proven reserves at around 110 billion barrels, while the more speculative categories of probable and possible reserves were put at 178 billion barrels and 248 billion barrels respectively.

The question of which measure to use for production and planning purposes is a matter of judgment and caused controversy between the Aramco partners and the Saudi government in the 1970s. Since 1980, the Saudi government has been the sole owner of Aramco. From 1982, detailed field-by-field information about the company’s reserves and production has been restricted.

Saudi Arabia began reporting to OPEC that its “proved” reserves stood at around 168-170 billion barrels of crude oil. The Saudi figure was much higher than the 110 billion barrels of proved reserves reported by the Aramco partners a few years before. But it was very close to the figure for possible reserves that the Aramco partners had reported to the U.S. Senate.

That raised the question if the Saudis had chosen to increase their reported reserve base by reporting probable reserves as proved reserves. In 1988/89, the proved reserve figure jumped again to 260 billion barrels despite no major new discoveries.

This was much higher than the proved figure reported by the Aramco partners but not far off the figure of 248 billion for possible reserves they had reported in the 1970s. Again that posed the question whether the Saudis were reporting possible reserves as proved to increase the size of their reserve base.

The Society of Petroleum Engineers and the U.S. Securities and Exchange Commission have strict definitions for estimating and reporting reserves (“Guidelines for Application of the Petroleum Resources Management System”, SPE, 2011).

But it is far from clear that the “proven” reserves which Saudi Aramco has reported to OPEC employ the same definitions; because the calculations are secret outsiders have no way of verifying them. It is not uncommon for countries to produce far more oil than initial reserve estimates suggested would be possible. Reserve increases can come from the discovery of oil and gas deposits or from an increase in the estimated amount of oil that is commercially recoverable from an existing field.

Reserve growth from existing fields, also known as field appreciation, is one of the most important sources of increases in oil reserves in most countries. As understanding of the reservoir increases, more information is known about its extent, and new technology and techniques become available, the amount of technically recoverable oil may rise ("Reserve growth of oil and gas fields", United States Geological Survey, 2013).

Because the calculation of reserves is deliberately conservative, it is fairly common for reserves initially reported as "possible" to become "probable" and eventually "proved". But Saudi Arabia seems to have been unusually reliant on reserve growth within existing fields to revise its reserves up to 265 billion barrels and keep them there since the late 1980s.

Saudi leaders have announced plans to seek a stock market listing for Saudi Aramco and make up to five percent of the company's shares available to investors. The prospect of a partial floatation has triggered renewed interest in Aramco's reserves since they could be an important part of any valuation.

If Saudi Aramco was required to comply with the normal listing rules it would have to make much more information available about its reserves and how they are calculated. But there are reasons to be cautious about expecting much more transparency: it is far from clear that any share sale would include ownership of the reserves in the ground.

In the meantime, no one really knows how much more oil can be recovered from beneath the Saudi desert and adjoining areas in the Gulf. Rystad Energy, a respected consultancy, puts Saudi Arabia's proved reserves at 70 billion barrels, and its proved and probable reserves at 120 billion barrels.

If new field discoveries are included the reserve figure could grow to somewhere between 168 billion and 212 billion barrels ("United States now holds more oil reserves than Saudi Arabia", Rystad, 2016). All these figures are substantially below the official numbers for proved reserves, though at the upper end the gap is relatively narrow. The implication is that Saudi Arabia is relying on reserve growth from the reclassification of possible reserves and fresh discoveries to maintain its proved reserves at the same level since the 1980s.

Energy supply, investments and the view from Gazprom

Natural Gas Europe, *08.07.2016*

At the half-way point of the year, European prices are beginning to show some resilience. The average UK system price at the NBP was up 13% in June compared with May, owing in part to Norwegian production problems.

The IEA said in its report that it had been a "turbulent six months." Less oil has been stock-piled than it originally expected and since January its forecast surplus of 1.5mn b/d of supply in the first half of the year is looking to be almost half that, at the end of the period. Brent crude oil prices rallied to a 2016 high above $51/barrel in June, stoked by continuing outages in Nigeria and Libya and fires in Canada.

May marked the third straight month of average price rises in Brent and WTI futures. But on July 7 Shell ended a two-month-long force majeure on Bonny Light exports, meaning more crude was on the way again.

Possibly coincidentally, but reflecting the bullish mood nevertheless, the past week saw some big upstream investment decisions: UK major BP approved the third train of Tangguh LNG on July 1: as costs continue to fall the cost is likely to be at the lower end of the widely-reported but unconfirmed $8bn-$10bn range. Most of the output of the 3.8mn metric tons/year train is being sold in Indonesia, the remaining quarter is going to Kansai Electric.

More spectacularly the Tengiz Chevroil expansion programme for Kazakhstan got the go-ahead too this week, perhaps signalling hope that the costs were now locked in, while the oil price could still rise. The project, expected to cost $40bn in 2014, is now put at $36.8bn.

US Henry Hub gas prices have also been strong, rising by almost 50% between the end of February and the beginning of July as summer got off to a scorching start. They are now nudging the $3/mn Btu mark, and making the export of LNG to Europe's liquid markets less appealing than ever.

There are other factors to consider than just the difference between the two market prices: the buyer might be able to use slightly cheaper US LNG to back out more expensive gas, or to fill an unscheduled supply gap, or to burn in power plants to sell power in a captive market. These factors could mitigate the effect of an adverse arbitrage if the buyer also had already paid for liquefaction and had a tanker on stand-by.

But generally the strong US prices might explain why only the second LNG cargo from the US to come to Europe in four months is poised, reportedly, to arrive in Spain later this month: a country not well connected to the rest of the EU or even one enjoying much spot market liquidity compared with its neighbours to the north.

A new import terminal in one of its neighbours, at Dunkirk in northern France is readying for its commissioning cargo from Nigeria, scheduled to arrive July 8. State EDF's partners in mainland Europe's biggest terminal, the 13bn m³/yr facility called Dunquerque LNG, are Belgian grid and terminal operator Fluxys (25%) and fellow French Total (10%); but when it is commissioned the operator will be Gaz-Opale, a company 51% owned by Dunkerque LNG and 49% by Fluxys.

And this week saw the Swiss-registered subsidiary of Novatek experimenting with spot LNG trade, buying a cargo from Atlantic LNG in Trinidad for delivery to the port of Quintero in Chile: at 19 knots, a 10-day voyage through the Panama Canal.

Its statement suggested it was limbering up for next year, when its Yamal LNG project, in which Total is also a partner, will start exports. Most of the plant's output is aimed at Asia, but the terminal in Russia's far north will send LNG westwards in winter using ice-class tankers. The transhipment to cheaper vessels will happen at Zeebrugge, not Dunkirk, Fluxys and Yamal agreed in March 2015.

In Russia, Gazprom's CEO Alexei Miller took the opportunity of the shareholders' general meeting on June 30 to highlight some of the company's achievements at home – building gas-fired power generation projects, improving storage capacity, expansive gasification programmes and installing natural gas vehicle infrastructure – that might have gone unnoticed in the West, which has generally been more interested in what Gazprom might be doing abroad.

Some of his other remarks were warning shots to other companies eying the European market: he said that "if it were necessary, we can build up our production in a short time. This is one of Gazprom's competitive advantages in the domestic and foreign markets," referring to the giant Bovanenkovo field in Yamal, whose development has been put on hold while European demand catches up.

Observers say that while gas-fired power generation has not delivered to the extent gas marketers had hoped, there are encouraging signs here and there: for example July 1 saw the start of the consultation into the cap on output at the Groningen field, which could reduce the giant field to 23bn m³/yr in all but the coldest years, with a knock-on effect for gas import demand.

Last year, Miller said, gas production continued to decline in Europe, while the demand for imported gas kept growing. In 2015, Gazprom supplied 159.4bn m³ to Europe, which was up 8% on 2014. "In 2015, we took efforts to strengthen this advantage by expanding and modernizing our production capacities.

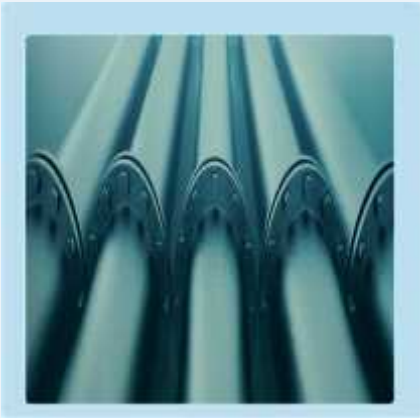
Special emphasis was placed on the fields offshore the Yamal Peninsula and in northern seas. Gazprom's gas production centers in Western Siberia are evidently shifting north, moving deeper into the Arctic Circle. Last year, the field produced 61.9bn m³, which was 19bn m³ more than in 2014. The goal is to bring it to 115bn m³/yr – "enough to cover gas demand in Austria, Belgium, France, Romania and Spain put together."

Concurrently the company has developed the corridor for gas delivery from the Yamal gas production centre to western and central Russian regions, as well as for the future Nord Stream 2 gas pipeline. This was another theme: Russia is no stranger to the white-hot heat of technology.

As the rouble is so weak and imports prohibitive, the trunkline “will use cutting-edge technologies that dramatically reduce gas transmission costs,” and Gazprom is using “unique Russian-made pipes with a diameter of 1,420mm and a working pressure of 120 atmospheres.” Higher pressure means fewer compressors. He said the section of pipeline linking the field to the junction at Ukhta would be completed this year.

Is Russia winning the oil export war against the Saudis?

Oilprice, *05.07.2016*



Russia is on track to set a new record in oil exports, and Iran is boosting exports to Europe, intensifying competition on the continent, which is a key market for both countries.

Russia has surprised analysts time over time by keeping oil production at near-record levels throughout the rock bottom of the oil bust. Not only has Russia managed to keep output at high levels, it has actively increased its exports to China and has managed to maintain its market share in other key markets. Russian Energy Ministry figures reveal a 4.9 percent increase in exports to 5.55 million barrels a day during the first half of 2016 when compared to the same period last year.

In June, the country’s output rose 1.14 percent from a year earlier, with total crude export figures on the rise during every month since summer 2014. “If production remains steady, then it will likely be a record year for exports,” said Christopher Haines, head of oil and gas at BMI Research told Bloomberg. “This should mean competition is strong, especially with Iran sending more oil into southern Europe.”

Russia – also known as the world’s most prolific energy producer – said earlier this year that it would fund a spike in crude production after members of the Organization of Petroleum Exporting Countries (OPEC) failed to agree on a plan to reduce the existing glut in oil and gas markets.

Iran has also been increasing production as it aims to regain market share after international sanctions against it were lifted earlier this year. The year 2012 saw Europe banning Iranian oil as a political reaction to the country’s secretive nuclear program. In the years that followed, Russian Urals crude, a blend similar to Iran’s formula, became a popular alternative.

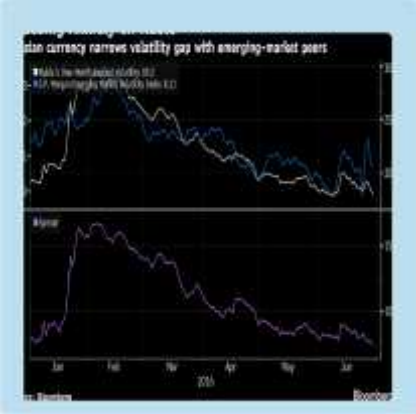
Last year, the European Council on Foreign Relations released a report outlining new energy sources for Europe. The document called Russia an “unreliable partner” and suggested several Central European and Middle Eastern countries – including Iran and Iraq – as possible suppliers in the near future, albeit with logistical caveats. “There are also infrastructural constraints, such as the geographical distribution of resources in Iran relative to its consumption, as well as the lack of production and export infrastructure,” it said.

"Iran's gas resources (for example, the South Pars field) are in the south. Therefore, substantial investment would be needed to bring gas to the northwest to tap into Europe's Southern Gas Corridor."

The European Union might be skeptic about increasing its crude supply from Russia, China seems to be keen on receiving more Russian Crude. Russian oil exports to this part of the world have doubled year over year last April at the expense of Saudi Arabia and Iran.

Russia's savior from oil's drop is now snuffing out recovery

Bloomberg, *06.07.2016*



Russia is finding the flip side of a flexible currency less and less appealing. A free-floating ruble, its antidote to the crash in oil prices, is now working against an economy mired in the second year of recession.

As crude soared by more than a third in March and April, sending the Russian currency up more than 16 percent against the dollar, gdp resumed a decline after zero growth in February, according to estimates by the Economy Ministry. It did no better in May, when output shrank 0.8 percent. "The system that made possible the economy's adaptation to low oil prices is so far not generating growth," said Vartapetov.

No longer acting as a shock absorber, the ruble is getting in the way of a pickup in growth that the government expects to resume next year. The decision to allow the currency to trade freely ahead of schedule in late 2014 was among the emergency steps taken to pull the economy from the brink as oil's collapse added to a bruising standoff with the West over Ukraine.

It has helped protect budget revenue and reserves, sped up adjustments in trade and thrown a lifeline to struggling domestic producers. Even as the ruble's rebound has lagged a rally in commodity markets, it has still gained more than 14 percent against the dollar this year since touching a record low in January, making it the fourth-best performer globally. That followed losses of 20 percent in 2015 and 44 percent the previous year.

Deprived of the currency advantage, local companies also have to contend with moribund consumer demand. Russia's finance minister said last month that the country isn't "interested" in a stronger exchange rate and a fiscal mechanism that's under discussion would insulate the economy from the ups and downs in crude.

The ruble's 30-day correlation with the price of oil was at 0.67 on Wednesday, near the highest in a month. A value of 1 would mean the assets are moving in lockstep. It reached a peak of 0.87 in March.

The Russian currency headed for its first gain in three days, trading 0.1 percent stronger at 64.26 against the dollar at 8:11 p.m. in Moscow. Brent crude, which is used to price Russia's main export blend Urals, was up 0.7 percent to $48.31 a barrel after plunging 4.3 percent.

As a resurgent ruble cuts into export proceeds and makes foreign goods more competitive in Russia, it's also denting corporate profits, which are down a combined 8.2 percent from a year earlier in January-April after a 53 percent surge last year. Lending to companies has declined in every one of the past four months, central bank data show.

Almost all the value-added components of GDP deteriorated in May, according to state development lender Vnesheconombank, which estimates that the pace of contraction worsened to 0.4 percent on a seasonally adjusted basis. Despite the improving outlook abroad and rising exports, output continues to shrink, said Andrei Klepach, chief economist at Vnesheconombank.

"Statistical data show no turning point in the economic dynamics," said Klepach, who previously served as the government's top forecaster at the Economy Ministry. "The ruble's strengthening in the spring months is starting to impair financial results of companies."

The EU's Energy Union: A sustainable path to energy security?

Italian Journal of International Affairs, *08.07.2016*

The European Commission unveiled its blueprint for an EU Energy Union, one of the most widely discussed projects of the first months in office of the Juncker Commission.

The Commission's "Energy Union package" is a strategic document that is meant to pave the way for the creation of an integrated European energy market, where member states cooperate to strengthen their energy security, decarbonise their economy and reduce waste in energy consumption. Making the EU's energy sector more climate-friendly and decreasing its reliance on external energy suppliers are the overarching objectives of the Energy Union.

The Energy Union package outlines five broad and interrelated policy tasks: increasing energy security, solidarity and trust; creating a fully integrated European energy market; improving energy efficiency while contributing to the moderation of demand; decarbonising the economy; supporting research, innovation and competitiveness.

The package reiterates some of the long-standing objectives of EU energy policy, notably the integration of the internal energy market and strengthening the security of energy supplies from abroad. However, it also includes new elements, particularly the focus on innovation and the technological upgrading of energy systems.

The proposal to create an EU Energy Union was first made by the then Polish prime minister (and now president of the European Council) Donald Tusk in April 2014. Tusk's proposal put particular stress on the exploitation of domestic fossil fuels (coal, oil and gas) and the creation of a joint European gas purchasing authority. This, he argued, would prevent "Russia's energy stranglehold" on Europe. In the following ten months, however, the European Commission largely reframed and developed Tusk's initial proposal.

Tusk's call was a response to Russia's annexation of the Crimean peninsula and its destabilisation of Ukraine, which put the EU on a confrontational path with Moscow, a key fossil fuel supplier of the Union.

The Commission's Energy Union package reflects concerns about excessive reliance on Russia as an energy provider. However, its rationale and objectives are broader. The package builds on the legislation previously adopted by the EU, such as the 2009 directives and regulations outlining common rules for the electricity and gas markets, which constitute the Third Energy Package.

This legislation aimed at integrating and opening up national gas markets. Most importantly, the EU's climate goals and the idea of sustainable economic development profoundly influenced the philosophy of the Energy Union.

Nonetheless, it is unclear whether the EU will manage to implement the Energy Union package and ensure its energy security through a sustainable and environment-friendly process. Some member states, most notably Hungary, do not show particular concern for the EU's dependence on Russian energy supplies and fear that the Energy Union could be a hurdle to future deals with Russia.

Other member states – particularly Poland and the United Kingdom – advocate the exploitation of contentious and heavily polluting fossil fuels, particularly shale gas and coal. The shale gas boom in the United States made cheap American coal available for export to the European market and raised hopes that Europe could replicate the US experience.

Due to the current low prices of fossil fuels and the costs of the transition to a low carbon economy, many of the EU's East European members consider the decarbonisation of their economy unaffordable and are reluctant to endorse policies in favour of renewable energy and energy efficiency.

The different composition of the energy mix in EU member states partly explains their distinct policy priorities. Coal still plays a key role in the energy mix of many East European member states (notably Estonia, Poland, the Czech Republic and Bulgaria), where it is used in electricity generation.

All member states rely on oil as an energy source, but for some (Malta, Cyprus, Luxembourg, Greece, Ireland) this reliance is much higher and exceeds half of total energy consumption. Gas is the main source of energy in the Netherlands, the United Kingdom, Hungary, Lithuania, Romania and Slovakia; it is also a major component of Italy's and Germany's energy mix. Nuclear power is the main energy source in France and covers more than 20 percent of energy consumption in Sweden, Slovakia, Bulgaria and Slovenia.

These differences, as well as the varying degrees of dependence on the import of energy from abroad, complicate the task of integrating national energy markets in the EU. What are the obstacles to the creation of the Energy Union? Can an EU Energy Union be reconciled with the EU's climate goals? What would be its foreign policy implications? It is argued that instability in the EU's neighbourhood – where most of the EU's energy imports originate – is the key driving factor behind the Energy Union.

This involves the risk of an excessive securitisation of the project, whereby climate and environmental targets could be marginalised and priority is given to the exploitation of fossil fuels. Limited funding and the lack of ambition of the EU's renewable and energy efficiency targets pose considerable obstacles too.

Furthermore, the lack of coordination among national energy mixes and policies could prevent the integration of national energy markets. In order to implement an environmentally sustainable Energy Union, the EU will have to create adequate governance mechanisms, reconcile different national priorities and potential conflicts with member states.

The ensuing analysis sets out the broader context in which the Commission prepared the Energy Union package, notably the crisis in relations with Russia and the debate on climate targets. It then focuses on how the EU plans to implement the Energy Union, the domestic challenges that will arise in the process and the foreign policy implications of the project.

The European Union is heavily dependent on the import of energy from abroad. In 2013, the primary production of energy in the EU was less than half of the Union's gross consumption. EU production has dropped by 15 percent since 2004, particularly due to the drop in energy generation from declining domestic fossil fuel resources.

On the other hand, the EU's import dependence increased from 46 percent to 53 percent between 2000 and 2013.7 Dependence on energy imports is particularly high in some member states, such as Italy, Ireland, Cyprus (over 80 percent of total energy consumption), Germany, Spain, Austria, Lithuania and Slovakia (between 60 percent and 80 percent).

According to Vice-President of the European Commission Maroš Šefčovič, the EU spends 3.2 percent of its gross domestic product on energy imports, namely over 1 billion Euros per day. At the moment, wholesale electricity prices in the EU are 30 percent higher than in the US. Šefčovič, who is in charge of the EU's Energy Union, has argued that the EU could reduce costs and dependence from abroad by building a single internal energy market, increasing energy efficiency and differentiating its suppliers.

The question of differentiating suppliers became particularly relevant with the beginning of the Ukraine crisis and the ensuing standoff between the European Union and Russia. As of 2013, Russia was the main supplier of fossil fuels to the EU, providing – in terms of value – 34 percent of the oil, 41 percent of the natural gas and 28 percent of the coal imported by the Union.

Due to the difficulties and costs of importing gas from more distant regions of the world, dependence on Russian gas is the most sensitive issue. Some member states are more reliant on Russian gas than others:

Germany and Italy are the main importers in terms of volumes, whereas for five member states (Finland, Latvia, Estonia, Bulgaria and Slovakia) Russia is the only supplier. Furthermore, most East-Central European member states have little or no backups to Russian gas in the sectors where it is used (notably household heating).

EU countries have relied on Soviet/Russian gas supplies for several decades and, overall, Moscow has been a trustworthy supplier. Exports of Soviet gas to Western Europe started in the late 1960s and continued, unhindered by political developments, through some of the tensest moments of the Cold War. Currently, Russia has a strong interest in maintaining the image of a reliable partner, as its sales of natural gas, crude oil and petroleum products on the EU market constitute a large part of its exports.

However, excessive reliance on Russian gas could be a problem for the EU for both economic and political reasons. Russia has sold gas to EU member states at different prices, often imposing higher prices on East-Central European countries. This has hindered the integration of European gas markets.

In its gas supply contracts with East-Central European importers, Russian state energy company Gazprom imposed destination clauses requiring the purchased gas to be used in a specific territory. These clauses allowed Gazprom to keep price differentials among countries where it was the only or the dominant gas provider.

In September 2012, the European Commission opened an antitrust case against Gazprom, which has the monopoly of Russian gas exports to the EU. The case is still ongoing: in April 2015, following a long investigation, the Juncker Commission filed a legal suit against Gazprom, accusing it of abusing its market power and overcharging customers in Eastern Europe.

Russian gas supplies to the EU may become subject to disruptions due to the crisis between Russia and Ukraine. In 2006 and 2009, disagreements between Moscow and Kiev over the price of Russian gas sold to Ukraine resulted in disruptions of the flow of gas towards European markets, which seriously affected the economy and society in several East-Central and Southeastern European countries.

Thanks to the Nord Stream pipeline, which became operational in 2011, the dependence of the EU-Russia gas trade on the Ukrainian transit corridor has decreased compared to 2009. However, around 50 percent of Russian gas exports to the EU still reach the Union via Ukraine.

Southeastern European member states are heavily vulnerable to potential disruptions. Russia’s decision to cancel the South Stream project implies that, in the short and medium term, they will continue to depend on the Ukrainian corridor for their imports of Russian gas.

The EU mediated an agreement between Russia and Ukraine to secure the regular flow of gas in the winters of 2014–15 and 2015–16. However, the agreement will expire at the end of March 2016 and, given the extremely tense relationship between Moscow and Kiev, further disruptions are possible. Uncertainty over the future of supplies heightened following Russia’s announcement that, in the future, it will no longer channel gas through Ukraine, but will rely on different routes instead.

According to the Russian leadership, by 2019 the EU would receive the gas it previously imported via Ukraine through the Nord Stream pipeline or alternative infrastructure that will be built in Southeastern Europe. Some governments in Southeastern Europe welcomed the announcement.

However, amidst the tensions caused by the Ukraine crisis and the antitrust investigation, the European Commission reacted negatively to the Russian communiqué. Construction of the necessary infrastructure for the new transport route would require large sums of money and would not be completed before 2019, leaving the Southeastern flank of the EU dependent on the Ukrainian transit corridor until then.

Besides being a response to the EU's dependence on energy from abroad, the Energy Union is an attempt to address climate policy goals. In October 2014, EU leaders agreed to set targets to reduce greenhouse gas emissions and enhance the production of energy from renewable sources.

The targets include a 40 percent binding reduction in greenhouse gas emissions (compared to 1990 levels), boosting the share of renewables to at least 27 percent of total energy consumption and increasing energy efficiency by 27 percent. These goals are to be achieved by 2030. They were also the basis of the EU's negotiating position at the upcoming United Nations Framework Convention on Climate Change (which took place in Paris in December 2015), where global goals to reduce greenhouse gas emissions were discussed.

The 2030 targets build on the ones already agreed for 2020, which encompass a 20 percent reduction of greenhouse gas emissions compared to 1990 levels and raising the share of renewables to 20 percent.

Currently, the EU appears to be on track to achieve its 2020 targets. By 2012, it had already achieved a 17.9 percent reduction of greenhouse gas emissions. This was the result of a number of factors including structural changes after 1990 (notably the shift from heavy manufacturing industries to a more service-based economy), the progressive replacement of coal with gas, the increase in renewable energy and the economic slowdown that followed the 2008 financial crisis.

Twenty-five member states met or exceeded their 2013/14 interim goals for renewables. In 2014 renewable energy covered more than 15 percent of the EU's gross final energy demand. The decrease in overall energy consumption in some member states and the development of the renewable heating sector (using cheap biomass) contributed to progress in renewable energy. Achieving an additional target of 10 percent of energy from renewable sources in transport (also by 2020) will be more challenging, as the projected share for 2014 was of 5.7 percent.

The 2020 and 2030 targets should contribute to making the EU less dependent on energy imports: as the consumption of fossil fuels is reduced to limit greenhouse gas emissions, so will be the Union's reliance on imports of these raw materials.

In this respect, the climate and energy goals and the Energy Union are two steps in the same direction. Indeed, the Energy Union could complement and strengthen the EU's climate policy if its governance bodies strengthen the governance of the Union's climate and energy policy as a whole. In particular, governance mechanisms that supervise the implementation of the 27 percent renewables target at national level are highly desirable, as the target is only binding at EU level.

The same applies to the efficiency target, which is not binding at all and could be circumvented by member states. Their reluctance to proceed with the implementation of energy efficiency goals was highlighted in late March 2015, when the EU opened infringement procedures against all member states – with the sole exception of Malta – for their failure to translate the EU's Energy Efficiency Directive into national law.

Increasing energy security is a cornerstone of the Energy Union. According to the Commission's communication on the Energy Union (A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy), this will be done through the construction of new pipelines carrying gas from Central Asia to Europe (the Southern gas corridor) and the creation of liquefied natural gas (LNG) hubs in East-Central Europe and the Mediterranean.

The new infrastructure is supposed to be complemented by new gas storage sites and the possibility to use "reverse flows", namely channelling the gas wherever it is needed in the EU market and beyond. In 2014 and 2015, for instance, the EU used reverse flows to supply Ukraine with gas, following Russia's decision to suspend deliveries to Kiev.

The new infrastructure would diminish Russia's role in the portfolio of EU gas providers. However, it would not reduce EU energy dependence from authoritarian regimes, as gas for the Southern corridor would be bought predominantly in Azerbaijan and, potentially, Turkmenistan.

Additional reliance on LNG would not be unproblematic either, due to the cost and environmental impact of the transportation and regasification of liquefied gas from distant countries such as the US and Qatar. Moreover, potential US exports of LNG would be more profitable in the Asian markets, where demand and prices are higher than in Europe. Unsurprisingly, US President Barack Obama stated that US supplies will reach the world market, rather than go directly to Europe.

The Energy Union package recommended that member states should be able to rely on their neighbours in gas supply crises. However, it did not include a plan for joint gas purchasing, which was a key element of Tusk's initial proposal. This was largely due to the stance of some member states, such as Germany, which highlighted how joint purchasing would run against the liberalisation of gas markets. The representatives of the gas industry (Eurogas) and of gas traders (European Federation of Energy Traders) also opposed collective gas purchasing, on the grounds that it would undermine prospects for a competitive energy market.

Hence, the package only stated that the Commission would assess voluntary demand aggregation mechanisms for gas purchasing in crisis situations or for member states depending on a single supplier. Some experts argue that East-Central European and Balkan countries could set up joint gas purchasing. However, even leaving aside technical difficulties, it is not sure that such a regional mechanism would be sufficient to extract cheaper prices from Russia.

Furthermore, the Commission asked to be informed about intergovernmental agreements (IGAs) on gas supplies with third countries from an early stage of negotiations, so that it can review them and make sure they comply with EU rules and goals. This request follows a dispute between the Commission and six member states that signed IGAs with Russia for the construction of the South Stream pipeline, a project for shipping Russian gas to Southeastern and Central Europe via the Black Sea.

In December 2013, the Commission declared that the IGAs breached EU law. Most likely, the Commission's request to screen IGAs will cause friction with member states that are keen to retain their prerogatives in energy deals with non-EU partners.

The Energy Union package mentioned only briefly the controversial question of unconventional gas and oil exploitation in Europe. It argued that unconventional fossil fuels could contribute to decreasing import dependency for states that choose to invest in them, after having adequately assessed public acceptance and environmental risks.

Due to its ecological hazards, environmental organisations have criticised harshly shale gas extraction and some member states (most notably France) have banned it. Furthermore, estimates of shale gas deposits in East-Central European EU member states have been revised downwards and companies such as Chevron have abandoned exploration, suggesting that there will be no repetition of the US shale gas revolution in Europe.

Nonetheless, other EU members (notably the United Kingdom and Poland) and some lobby groups are trying to ensure that EU policy prioritises shale gas development. Pro-shale lobbies have become dominant in relevant EU technical and advisory panels, notably the EU Joint Research Centre's European Science and Technology Network on Unconventional Hydrocarbon Extraction. The ensuing decision of prominent environmental organisations to walk out of this network highlights that shale gas development remains highly controversial in the EU. It will be difficult for the Energy Union project to simply circumvent the issue.

While differentiating energy sources and suppliers would reduce overreliance on single countries, building an internal energy market would even out domestic prices and provide further supply security. In order to achieve this, the Energy Union package has set a minimum interconnection target of 10 percent to be met by 2020.

This means that, by 2020, all member states must be able to transfer at least 10 percent of their installed electricity production capacity to their EU neighbours. The Commission has produced a separate Communication outlining how this target can be achieved, thereby confirming that it is an immediate priority.36 Linking the remaining energy islands – notably the Baltic states and the Iberian peninsula – to the main electricity and gas network is considered particularly urgent.

The question of governance was also addressed. Establishing adequate governance mechanisms is essential for the implementation of the Energy Union. The Commission recommended the full implementation of the Third Energy Package, a set of rules liberalising the energy sector and unbundling energy production from distribution.

Most importantly, it advocated the strengthening of the Agency for Cooperation of Energy Regulators (ACER) in order to enable it to oversee the development of the internal energy market. Until now, ACER has focused primarily on assisting national energy regulators, but the Commission seems to be planning to transform it into the main governing body of the Energy Union. If this is indeed the Commission's intention, member states' acceptance of the new role of ACER will be essential for its successful functioning. The Commission's communication defines energy efficiency as "an energy source in its own right".39 It identifies the transport and building sectors among the most critical ones, highlighting that 75 percent of the European housing stock is energy inefficient.

As the majority of EU gas imports are used for the heating and cooling of buildings, improving their energy efficiency would reduce both costs and dependence on external gas suppliers. As for the transport sector, 94 percent of transport relies on oil products, of which 90 percent are imported. As the Commission noted, making the sector more efficient and decarbonising it – particularly through the electrification of road and rail transport – would help break the oil dependence. However, the 27 percent target for energy efficiency in the 2030 climate and energy framework is not binding, hence member states will have little additional incentive to address the issue.

By contrast, the fourth goal of the Energy Union, decarbonising the economy, is likely to meet with at least some success, as member states have agreed to a binding 40 percent reduction in greenhouse gas emissions by 2030. Reforming the Emissions Trading System (ETS), which regulates the EU market of carbon emissions, could assist the EU in meeting the target and in developing renewable energy.

In particular, the cap of allowed carbon emissions should be adjusted to the 40 percent target. This would have an impact on the price of emissions and provide incentives to invest in renewables and green technologies. At the moment, the carbon price in the ETS is very low due mostly to an oversupply of emissions permits, which was caused by an overestimation of future emissions when the ETS was set up in 2005.

The Energy Union package also states that the EU should become “number one in renewables”. However, besides arguing that energy markets and grids have to be fit for renewables, it does not add much substance to the debate on how this should be achieved. It simply recalls the 27 percent target of the 2030 framework, without addressing either the uneasy question of its implementation at national level or the fact that the target itself is modest and should be revised upwards.

Research and innovation in renewable technologies, energy storage, smart grids and sustainable transport are all essential in order to decarbonise the economy and achieve EU climate goals. The Energy Union package stresses this in its fifth dimension. However, this section leaves some ambiguity, which could be exploited by member states that are reluctant to decarbonise their economies and invest in renewables. In particular, the package argues that the EU should invest in “clean fossil fuels”, a contradictory statement: burning fossil fuels pollutes by definition (one can only argue that some pollute less than others, but none is “clean”).

Furthermore, the Commission emphasised carbon capture and storage (CCS), a technology that allows carbon emissions to be captured and stored before they spread in the atmosphere. The use of CCS in the power and industrial sectors is considered “critical to reaching the 2050 climate objectives in a cost-effective way”.

However, CCS technology is expensive and private investments will not suffice to finance it. Hence, CCS may distract public funds from renewables and delay the transition to a low carbon economy. It can also foster unrealistic hopes about making electricity generation from coal environment-friendly and therefore have the indirect effect of propping up the coal sector. Creating the Energy Union will take time and come up against numerous challenges. In the short run, funds will have to be found to finance the thirty-three infrastructure projects that the European Energy Security Strategy identified as essential to improve supply security and market integration. The Commission hopes that private investments will pay for most of the new infrastructure.

However, if private investments are not forthcoming, a selection of the most urgent projects will be necessary and the EU will have to allocate more public funds (for example, from the new Investment Plan).

A high degree of intra-European solidarity will be necessary, as the most urgent infrastructural projects will have to be implemented in poorer member states, in Eastern and Southern Europe. In order to reconcile the Energy Union with the EU's climate goals, the Commission should fund first and foremost projects that boost energy efficiency and the production and trade of renewable energy.

For the same purpose, European institutions should resist pressure from interest groups and member states to shift the focus of the Energy Union towards fossil fuels. According to recent media analyses, large fossil fuel companies successfully lobbied the European Commission to limit the ambition of the EU's 2030 climate targets.

In the run up to the deal on the targets, the multinational oil and gas company Royal Dutch Shell conducted a joint and successful campaign with a few member states, led by the United Kingdom, to prevent binding targets for individual member states on energy efficiency and renewable energy. However, if the EU wants to meet its goal of cutting greenhouse gas emissions to 80 percent below 1990 levels by 2050, binding targets for renewables and energy efficiency will have to be agreed.

In order to level energy prices and create a truly integrated energy market, national fuel mixes should be coordinated, the interconnection of national energy systems should be higher than the current 10 percent target and subsidies to national energy industries should be phased out.

Doing this will not be easy, as member states will most likely defend their national industries and the prerogative to determine their energy mix. This prerogative has solid legal foundations, as it is enshrined in article 194 of the Treaty on the Functioning of the European Union (TFEU).

According to the TFEU, member states and the EU share competence on energy policy. Hence, the Energy Union will have to be implemented in close coordination with member states. Their political will and support is essential for its functioning.

However, conflict between the Commission and member states is to be expected with regard to the Commission's request to screen intergovernmental agreements on energy supplies with third parties before they are concluded. Hungarian Prime Minister Viktor Orban has already argued that this would constitute a "major problem" and hinder national sovereignty.

Another potential risk is that the rhetoric of some EU leaders concerning the Energy Union aggravates political confrontation with Russia. Tusk's initial proposal reflected this problem. Moreover, potential Russian objections to the mechanisms of the Energy Union (such as reverse flows or aggregated gas purchasing) could worsen political tensions.

Due to contractual obligations between EU and Russian companies, the EU's growing dependence on energy imports and the competitiveness of Russia's fossil fuel exports, it can be estimated that Russia will remain a key supplier of the EU at least until 2030. Hence, Brussels will have to pursue a fair business relationship, while ensuring that its internal market rules are respected.

At the same time, the EU should not develop new energy dependencies on other authoritarian states (such as Azerbaijan or Qatar), nor expect to receive gas from the US at discount prices, as it will have to compete for it with Asian countries.

Furthermore, current low oil and gas prices are putting the further development of the American shale industry into question, which could become unprofitable and consequently experience drastic cuts in production. If this happens, there may be no US shale gas to export.

Overcoming the numerous obstacles to the implementation of the Energy Union will be very demanding. The weak commitment of EU member states to integrating the electricity and gas markets and to coordinating national energy policies has hindered the implementation of previous Commission strategies, such as the 2006 Green Paper on energy.

The Ukraine conflict and the debate on the effects of climate change have built momentum behind the Energy Union and the EU's decarbonisation agenda. However, their successful implementation is far from certain.

The Conclusions of the European Council on the Energy Union, held on 19 March 2015, reflect the challenges that will arise in the coming months. The document is a balancing act between the interests of different member states, as well as between those of member states and the Commission.

For instance, the Council simultaneously calls for reinforcing the transparency of agreements to buy gas from external suppliers and for guaranteeing the confidentiality of commercially sensitive information therein.

The Conclusions emphasise both the need to strengthen the security of gas supplies – including recourse to indigenous resources, which can be read as encompassing shale gas extraction – and the development of renewable energy and climate-related technology. The order of priority of these objectives is not specified (even if strengthening gas and electricity infrastructure appears first on the list), which leaves policy options and the very nature of the Energy Union open to future debate.

If the Commission consistently supports an agenda prioritising solidarity, renewables and sustainable development, there will be good prospects for an integrated and fully functioning energy market with lower prices, a greener energy mix and reduced reliance on external energy suppliers.

Boosting the production of renewable energy and investing in energy efficiency would greatly contribute to the EU's energy security, as these are the only factors that can make the EU self-sufficient in the long term. Through an emphasis on efficiency and renewables, the Energy Union could also help the EU achieve its 2030 climate policy goals, or even make them de facto more ambitious.

In this respect, it is important that the Commission presented – as part of the Energy Union package – a communication on preparing the EU's negotiating position for the UN Framework Convention on Climate Change in Paris.58 It is essential that the EU participate in UN climate change summits with a single position and a strong, coherent delegation. This allows the Union to maximise its influence and profile itself as a leader in climate change policy.

EU leadership, the political will of member states to coordinate their energy policies, environmental awareness across the Union and the availability of sufficient funds to implement infrastructure projects will be the key determinants of success. If any of these are missing, the Energy Union may develop into a simple ‘repackaging’ of existing arrangements and fail to deliver a united energy market.

US crude oil inventories decline

AA Energy Terminal, *08.07.2016*

Weekly crude oil inventories and production in the U.S. declined, while imports increased, for the week ending July 1, according to the country’s EIA data.

Commercial crude oil stocks fell by 2.22 million barrels, or 0.4 percent, to reach 524.4 million barrels during that period. Strategic Petroleum Reserves remained unchanged at 695.1 million barrels. The market expectation was a 2.25 million barrels decrease in inventories. In the previous week, the stocks were down by 4.05 million barrels. In addition, the U.S. oil production fell by 194,000 bpd during the same period to reach 8.43 million bpd, according to the EIA.

“In part, the decline in oil stocks was a result of a massive drop in U.S. production, with output in Alaska falling by about 150,000 bpd, compared to a 38,000 bpd fall in the rest of the U.S.,” said London-based Capital Economics’ U.S. Weekly Petroleum Status Report. “Partly offsetting this was a sharp rebound in net-imports,” author of the report and Commodities Economist Thomas Pugh noted. Weekly imports increased by 808,000 bpd during the same week to reach 8.36 million bpd, according to the EIA.

After the release of the EIA’s weekly data, West Texas Intermediate fell below $45 a barrel, while Brent crude price dived below $47 per barrel. “Oil prices have fallen by almost 3 percent on the release of the report, despite the falls in stocks and production. This is largely because the much more bullish API numbers had raised expectations of a larger fall in stocks,” Pugh explained. American Petroleum Institute (API) said it estimated crude oil inventories decrease by 6.7 million barrels last week.

Announcements & Reports

► *Monthly Oil Market Report*

Source : OPEC
Weblink : http://www.opec.org/opec_web/en/publications/338.htm

► *Natural Gas Weekly Update*

Source : EIA
Weblink : http://www.eia.gov/naturalgas/weekly/

► *This Week in Petroleum*

Source : EIA
Weblink : http://www.eia.gov/petroleum/weekly/

Upcoming Events

► *FSRU Asia Summit*

Date : 06 – 07 September 2016
Place : Amara Sanctuary Resort Sentosa, Singapore
Website : http://www.fsrusummit.com/

► *Operational Excellence in Oil and Gas Europe*

Date : 19 – 21 September 2016
Place : London, UK
Website : http://www.opexinoilandgasemea.com/

► *Global Oil & Gas - Black Sea and Mediterranean*

Date : 22 – 23 September 2016
Place : Athens, Greece
Website : www.iene.eu

► *23rd World Energy Congress*

Date : 09 - 13 October 2016
Place : Istanbul, Turkey
Website : http://wec2016istanbul.org.tr/

► *15th ERRA Energy Investment & Regulation Conference*

Date : 17 - 18 October 2016
Place : Budapest, Hungary
Website : http://erranet.org/InvestmentConferences/2016

► *21st IENE National Conference "Energy and Development 2016"*

Date : 24 - 25 October 2016
Place : Athens, Greece
Website : www.iene.eu

► *European Autumn Gas Conference 2016*

Date : 15 – 17 November 2016
Place : Hague, Netherlands
Website : http://www.theeagc.com/

► *5th Greek Cyprus Energy Symposium*

Date : 29 - 30 November 2016
Place : Nicosia, Greek Cyprus
Website : www.iene.eu