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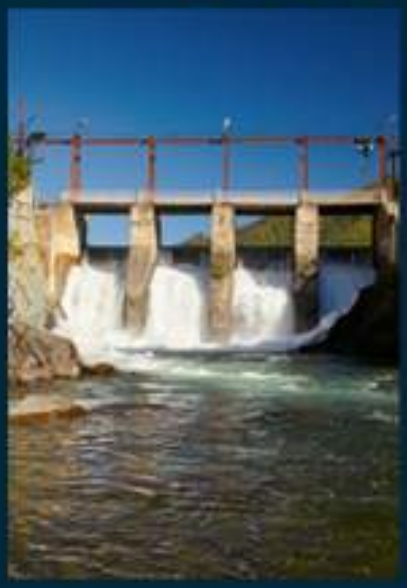

EUCERS
European Centre for Energy and Resource Security

King's College London

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Introduction

Welcome to the 42nd edition of the EUCERS Newsletter for the months of February and March.

This issue's general article section includes one piece by our current EUCERS fellow, Kalina Damianova on Iran's current position with regard to Europe's energy security and ongoing negotiations - also in light of EUCERS' last workshop on Iran's potential re-integration into global energy markets. Our second article is by EUCERS Senior Research Associate, Androulla Kaminara, on the role of gender in energy policy. Finally, Marina Petroleka, EUCERS Research Associate and Head of Energy and Infrastructure at BMI Research, covers the impacts of Europe's falling gas demand for energy security and markets.

We are most happy to announce that Dr Frank Umbach has accepted the offer of the influential Ukrainian think tank DiXi Group to become a member of their Supervisory Panel.

In EUCERS on the Road we continue to inform you about conference participation and presentations of our members, as well as latest publications.

I hope you enjoy the newsletter!

Justus Andreas
Research Associate and Newsletter Editor at EUCERS, King's College London

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ARTICLES

Iran, Energy, Security and the EU

Kalina K. Damianova

Iran's energy wealth and geo-strategic location - a bridge between East and West, allows it to export energy resources to both European and the rapidly growing Asian energy markets. However, due to various internal and international political, economic, and security constellations, Iran has failed to successfully exercise its energy potential domestically and internationally. Currently, two main blocking factors might be pointed out: the Iranian oil contract regime that is unfavourable to the International Oil Companies (IOCs) and the international sanctions, imposed on Iran due to the security concerns surrounding its not transparent nuclear programme. In light of the easing of Western sanctions and positive signs of possible reconciliation between Iran and the international community, along with Tehran's promise to introduce a new oil contract framework more favourable to the IOCs, the international and domestic environment now allows discussion of economic interests.

The world's 4th largest crude oil (157 billion barrels) reserves holder and once major exporter, Iran, might re-emerge as a key energy superpower affecting the global energy market and attracting the IOCs' interest. At the same time, the EU-Russia strained relations have put the EU diversification of natural gas supplies once again high on the EU's agenda. In this regard, as the world's 2nd largest natural gas (34bcm/1,192Tcf)[1] reserves have the potential to compete with those of Russia, the latest EU Energy Security Strategy envisages Teheran, under the condition of lifted international sanctions, as one of the few possible partners for energy diversification.[2]

Due to technical and political obstacles, reaching and developing Iran's full energy and export potential might take decades. Nevertheless, the EU's diversification to Iran, even if not in the short-term, might be considered an option for improvement of the EU's energy security, creating completion for gas prices and alleviating some of the EU's gas supply dependence. However, as energy relations are affected by and affecting the international political and security dynamic, strengthening EU-Iran cooperation, might entail political and security outcomes. Respectively, there can be distinguished three interdependent topics, determinative for the EU-Iran relations: the developments around the international political and security factors, the changes in the Iranian oil contract framework and Iran's possible export strategy.

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Iran Nuclear Negotiations

Among many other complexly interlinked factors, several key tendencies can be pointed out to have recently influenced the development of the Iranian case. Firstly, the devastating consequences of the international sanctions to the Iranian economy and society, further aggravated by the severe drop of the oil prices, brought Iran to the negotiating table. Secondly, the new Iranian government objectives showed Iran as a more moderate counter party. Thirdly, the complex conflicts in the Middle East, made the international community better understand that a more comprehensive partnership between the East and the West is needed for the improvement of the security environment. Finally, the global rise in energy consumption and the increasing importance of energy security have also become key motivators for cooperation.

As a consequence, on November 24, 2013 Iran and the P5+1 (the UN Security Council 5 permanent members: the US, the UK, France, Russia and China, plus Germany) reached an interim deal - Joint Plan of Action (JPA). Under the JPA, Iran agreed to halt the development of certain parts of its nuclear program in return of a relief from some sanctions. The JPA's final goal is to 'reach a mutually-agreed long-term comprehensive solution that would ensure Iran's nuclear programme will be exclusively peaceful.'[3] However, as significant gaps, around the level of uranium enrichment and sanctions continuations, remained present on the negotiating table, the JPA deadline was extended twice. As of March 20th, 2015, the latest deadline is set for June 30th, 2015, with an expectation of a political framework agreement to be reached by the end of March.

[1] OPEC (2014); Annual Statistical Bulletin 2014; http://www.opec.org/opec_web/static_files_project/media/downloads/publications/ASB2014.pdf;

[2] EU (2014), Communication from the Commission to the European Parliament and the Council: European Energy Security Strategy /*COM/2014/0330 final*/

[3] Joint Plan of Action(2013), http://eeas.europa.eu/statements/docs/2013/131124_03_en.pdf

With the JPA, in effect since January 20, 2014, some of the most devastating sanctions targeting Iran's oil exports have been eased. In accordance with the agreement, Iran's crude exports should average 1 million barrels per day (bpd), which is still far behind the 2011 pre- tightened sanctions period when they were 2.5 million bpd.[4] Nonetheless, this allowed Iran to continue exporting to its existing buyers- China, India, Japan, South Korea, and Turkey.

Dr Ali Majedi, former Deputy Oil Minister for International Affairs (2013-2014) and currently Iran's Ambassador to Germany, noted that the key outcome of the interim agreement was not only the relief that the Iranian economy experienced, but the 'shift in the international climate in favour of Iran,' which 'made international companies find more willingness to be present in Iran's oil industry'.[5] However, it should be mentioned that even in an event of international reconciliation, the lifting of a complex international legal framework consisting of multilateral and unilateral sanctions imposed on Iran would be a complicated gradual process. Nevertheless, sooner or later that inevitably leads to another pending question: under what legal regime will the foreign investments take place?

Oil Contracts

The Iranian Constitution prohibits the foreign and private ownership of natural resources and the state-owned National Iranian Oil Co. (NIOC) is responsible for the Iranian energy upstream sector. Although through the present oil contract system – the buy-back contracts (BBCs) - the IOCs are able to participate in the exploration and development phases, the inflexible and risky conditions of the BBCs made the IOCs reluctant to invest in Iran. Thus, apart from the effects of the sanctions, the post- 1979 Revolution energy sector has been crucially inefficient and lagging behind in modernisation, due to the lack of sufficient foreign investments.

In the context of changing energy markets, with increasing tendency of over-supply, in early 2014, the NIOC, motivated to attract IOCs back into the Iranian energy sector, announced that it was preparing new oil contracts, Integrated Petroleum Contracts (IPC). However, the IPCs official introduction, originally planned to take place in London, was postponed several times. It might be argued that the post-revolutionary Iranian oil legal regime reflects two conflicting tendencies: Iran's motivation to improve its energy sector by attracting foreign investment and Iran's historically inherited reluctance to grant foreign companies access to it. With the latter usually having a stronger influence, it will remain to be seen to what extent the officially presented new legal terms will actually be satisfactory to the international private sector, a determinative precondition for the attraction of the IOCs in the state.

The IPCs are said to have more favourable and flexible conditions, including the integration of the exploration and production phases and longer time duration. Although the new contracts promise to be more attractive to the IOCs, an overall improvement of the business environment in Iran would be needed to decrease the level of uncertainty and insecurity, stemming from the complicated political structure.

Possible Exports

Most recently, at OPEC's June 2014 meeting the Iranian Oil Minister - Mr Zanganeh, 'said Iran could increase oil exports by 500,000 bpd immediately after any lifting of sanctions and could pump 4 million bpd in less than three months after'.[6] Although, these predictions are considered too optimistic, the possibility of international reconciliation and the vast energy potential of Iran, inevitably attract the European companies' interest. Therefore, should there be an international agreement, the question whether Iran will unfold its energy might eastwards, where the majority of its existing consumers are and the growing energy market is, or it will prefer targeting the EU markets, which might entail more political leverage, gains key geopolitical significance.

Recently, Iran has expressed serious interest in future strengthening of its relations with Europe. In May, 2014 Mr Zanganeh said: "As a country that has the capacity to supply gas in large volumes, Iran is always willing to export natural gas to Europe via pipeline or in the form of liquefied natural gas (LNG)."[7]

While in terms of oil, Iran, once being the second-largest OPEC producer and with one of the oldest petroleum sector, has a promising future of re-emergence, the gas exports are more complicated. Firstly, Iran does not have LNG infrastructure and to develop one, most probably orientated to the Asian markets, where its neighbours already ship LNG, will take time, sufficient investment and technology.

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[4] EIA, Iran; http://www.eia.gov/countries/country-data.cfm?fips=ir

[5] Platts (2014), 21Jul., Iran oil industry benefits from interim nuclear agreement: official

[6] Reuters(2014),20Nov., UPDATE 2-Iran says will double oil exports in two months if sanctions end http://www.reuters.com/article/2014/11/20/opec-iran-saudi-idUSL6N0TA1DT20141120

[7] PressTV(2014), Iran ready to supply Europe with natural gas; http://www.presstv.com/detail/2014/05/08/361803/iran-ready-to-export-gas-to-europe/

Secondly, sharing with Qatar the biggest natural gas field – South Pars, Iran has for a long time planned to connect it to Europe via the so called Persian pipeline, which at the moment does not seem realistic. However, a smaller in scale, but more feasible plans to transport gas to Europe might be through its existing and possibly further extended infrastructure with Turkey. Additional questions may arise if the Russian backed, so called Turkish Stream, starts supplying much of the Turkish energy needs.

Meanwhile, Iran is building a gas pipeline for exports to Iraq and has also concluded an agreement with Pakistan for the construction of an Iran-Pakistan (IP) Pipeline, which has been experiencing delays, due to financing problems and concerns around the sanctions. Additionally, Iran has expressed interest in strengthening gas relations with India and its gulf neighbours, while Iran, itself, has a vast energy domestic consumption and imports gas from Turkmenistan. With the higher rate of natural decline of Iran's mature oil fields, Iran has also been using gas for reinjection for enhanced oil recovery (EOR) and for the development of the petrochemical industry. Naturally, some of the domestic elite groups oppose the gas exports, as gas being used for domestic purposes seems to be more beneficial to Iran for the time being.

In this regard, in near future, meeting its domestic needs, while fulfilling future export obligations, would be a too challenging ambition for Iran. Therefore, improving energy efficiency, energy sector modernisation, attracting foreign investments and building stable trustful relations with new partners, are the forth-coming steps and vital preconditions for any large-scale future exports.

Remaining questions

Undoubtedly, there has been a change in the international political climate, allowing more progress to be made in all of the spheres of interest, amid the Iranian authorities' attempt to improve the investment atmosphere. However, uncertainty remains present - whether or not a permanent deal will be finalised. Moreover, to reach and to maintain a stable and lasting deal, it is vital to have all parties strongly convinced to fulfil the possible final agreements. Yet, in regard to a permanent nuclear agreement, the perceptions on their domestic levels, of the US and Iran, in particular, have remained problematic.

In terms of energy exports, both Iran and the EU have expressed clear interest. Moreover, circumventing the Caspian Sea, where the Russian influence is very strong, Iran has also been seen as a transit state for natural gas from another EU's possible energy partner- Turkmenistan. But additional to the political and technical obstacles, any possible projects might be influenced by other energy superpowers whose interests are affected. Furthermore, deepening dependence with transit states, Turkey in this case, also arises questions for the EU.

Finally, Iran's domestic and international behaviour hides controversial issues of political, security and human rights character. Even if an international agreement is reached, Iran will have to show that its position in the Middle East contributes to peace and stability, in order to become a stable EU partner. In this respect, potential enhancement of the EU-Iran relations might suggest long-term implications for the EU and the international community. Same is, however, true if there is not any EU-Iran rapprochement. Iran would then probably strengthen its relations with China, India or Russia, which would lead to other shifts in the international configurations. Therefore, in both cases Iran and the future of its energy potential and role on the stage of the international relations will be an important topic, requiring deep and comprehensive analysis.

The Gender Dimensions of Energy Policy

Androulla Kaminara[8]

March is the month during which women's day is celebrated. It is therefore a good opportunity to take a closer look at energy policy from a gender perspective. When policy makers take decisions with respect to energy issues, it is rare that they do so fully cognisant of the dramatically different gender dimensions of energy policy. This article aims to provide an overview of the gender dimensions of energy policy and advocates that it is essential that these taken into consideration in all energy policy decisions.

This article looks at the following five aspects of energy policy:

A. The role of women as policy makers in energy and the gender aspects of the energy industry.

B. What happens to sectors of the economy when a country discovers large hydrocarbon deposits: The Dutch Disease and does the discovery of oil or natural gas tends to perpetuate patriarchy?

C. The gender dimension of energy consumers.

D. Health issues related to energy and their gender dimensions.

[8] Views expressed are strictly personal. Follow at http://Akaminara.wordpress.com & Twitter: @akaminara

E. Links between energy resources and conflicts and the effects on women.

A. The Role of Women as Policy Makers in Energy and the Gender Aspects of the Energy Industry

Over the last decades, there has been a global trend for increased female empowerment, with the number of female parliamentarians growing by 5% between 1995-2002 . However, countries such as Algeria, Russia and Kazakhstan – all of which have enjoyed a sharp rise in oil revenues – saw a fall in female representation.

According to the UNIDO, worldwide, women occupy around 19% of all ministerial jobs, but only 7% of these are in environment, natural resources and energy[9]. The same report mentions: 'evaluations from South Africa and Guatemala show that electrification has resulted in a 9% increase in female employment, with no comparable increase in male employment, and in Nicaragua electricity has increased the propensity of rural women to work outside the home by 23% while having no effects on male labour force participation' [10]

Normally government spending is mainly from what is collected in taxes, which makes the population interested and involved in monitoring the financial decisions of governments: what they spend and on what. Oil and natural gas wealth tends to decouple citizens from their watchdog function of the government. In oil rich countries, government spending relies less on the taxes paid by citizens, citizens are therefore less interested and usually have less access to information, on how much money is being raised and who is spending it, on what. Oil wealth therefore often leads to bad and corrupt governments. The list is of oil/natural gas rich countries which are governed by corrupt governments is unfortunately long. In corrupt and bad governments, the role of women is even further marginalized.

[9] Sustainable Energy for All: the gender dimensions – UNIDO – UN Industrial Development Organisation and UN Women report

[10] [10] Sustainable Energy for All: the gender dimensions – UNIDO – UN Industrial Development Organisation and UN Women report – page 13

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B. What Happens to Sectors of the Economy When a Country Discovers Large Hydrocarbon Deposits: The "Dutch Disease" and Does Petroleum Perpetuate Patriarchy?

The "Dutch Disease" is a phenomenon that was first identified and described in the late 1950's when the Netherlands discovered very large natural gas deposits. The phenomenon – later named the "Dutch Disease" – basically describes the following mechanism: a sudden large increase in the revenues of a country that are from natural resources make the nation's currency stronger compared with other countries and this in turn makes products exported from that country more expensive with regard to exports from other countries as imports become cheaper. This makes the manufacturing and the agriculture sectors of countries with large economic reliance on natural resources, less competitive and those sectors of the economy tend to shrink.

Oil is the world's most capital-intensive industry, so it creates few jobs. Nonetheless, it is true, that the discovery of natural resources does create some job opportunities in the energy sector. However, the relatively few jobs that are created, tend to be either heavily physical labour intensive, which often go to men or are highly skilled engineering jobs which again tend to be filled in by men. While women account for more than half of university graduates in several OECD countries, they receive only 30 % of tertiary degrees granted in science and engineering fields.[11]

In contrast, the manufacturing and agriculture sectors that shrink are often the sectors where there is a relative high women employment. Michael L. Ross in his book "The Oil Curse: How Petroleum Wealth Shapes the Development of Nations' looks at a number of countries that are oil rich and compares the oil income per capita of these countries and plots it against the percentage of parliamentary seats which

[11] UNIDO Study

are held by women. As can be seen from the chart below the countries with the highest oil income per capita tend to have less women parliamentarians.

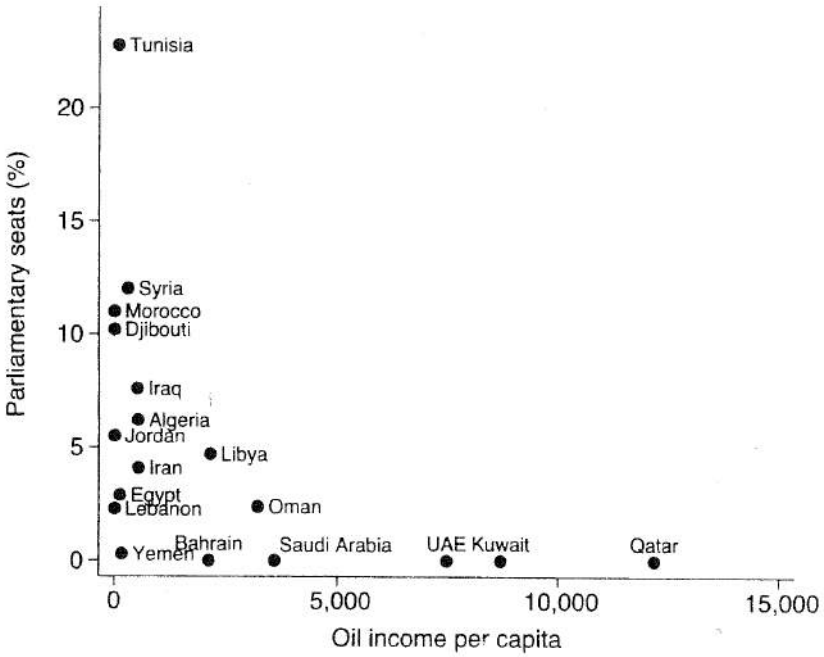

Figure 4.6. Oil and female parliamentary seats in the Middle East, 2002
The vertical axis shows the percentage of seats in the lower house of parliament that are held by women.
Source: Calculated from data collected by the Inter-Parliamentary Union, available at http://ipu.org/wmn-e/world.htm.

It has been shown from empirical studies that oil wealth, in most cases, tends to negatively impact the status of women. In general, the extraction of oil and gas reduces the role of women in the workforce and their role in political influence. Exceptions do exist. Oil rich countries such as Norway, New Zealand, Australia, Uzbekistan, Turkmenistan, pre-war Syria, and Mexico have made faster progress on gender rights than other countries without oil wealth.

Some argue that the differences in the level of women that enter the labour force in one country, with respect to another, can be partly explained, by differences in the level of discrimination which is rooted in the cultural, religious and legal environment of each country. "Economic and political marginalization frequently go hand in hand: without jobs women have less political influence, without political influence women find it harder to get jobs." As Michael L.Ross argues in his book this explanation is false or at best only partly true.

Oil exports from a country can have a detrimental effect on the role of women in society, as often, it leads to the decrease in the percentage of women in the labour force. Oil can have the opposite effect to manufacturing in a much as whereas the growth of the manufacturing sector tends to draw women out of the home and into the labour market, oil wealth encourages them to stay at home, and thus blocking their key pathway toward economic and political empowerment. In most countries, men are the main bread winners in families and women's salaries, only marginally contribute to the total family income. Women's employment is often in part-time jobs, lower wage jobs. In situations where oil wealth 'pays' for some of the expenses that families would be called to pay – such as some types taxes, or education bills – then the necessity to complement the main salary of the family by a marginal additional salary, become unnecessary and the women tend not to work.

In a very interesting analysis about the role of women in oil producers and in non-oil producers from different regions in the world – Ross demonstrates that the gap is largest in the Middle East and North America – *where the number of working women is about 23% lower in the oil states than in the non-oil states.* Oil states also have a significantly lower number of women in government – with the difference in the Middle East being more prominent with non-oil states having more than three times more female parliamentarians than the oil producing states.

Ross compared Algeria, Morocco and Tunisia. All three countries have the same religion, but Algeria having over half of the per capita income from oil, whereas Morocco and Tunisia have almost no per capita income from oil. Female labour participation in Algeria was at 12 % while in Morocco and Tunisia it was more than double (26% and 25 % respectively) and the female held parliamentary seats were 6% in Algeria and 11% and 23 % respectively in Morocco and Tunisia. Data and analysis clearly indicate

that low participation of women in the work force or in parliament is influenced by the big share of oil in the GDP of a country, and cannot be purely attributed to religious or cultural aspects.

C. The Gender Dimension of Energy Consumers

First of all, it has to be stressed that the per capita consumption of energy, differs if we are considering the developed or the developing world, i.e.:

- In Europe – per capita energy consumption is predominantly on: Heating/cooling, electricity and primarily for mobility and transport (i.e. cars)
- Whereas, in developing countries, energy consumption is on electricity, for domestic, medicine, education, enterprises- even small scale ones

The energy use per capita, in European countries, is greater among men than women. For example: in Germany and Norway men consume 70-80% more energy than women; in Sweden 100%; and in Greece 350%[12]. These dramatic differences are primarily due, to the fact that the biggest share of the per capita energy consumption, is from transport and particularly from the use of cars. In countries like Greece, most households would only have one car which is usually used by the man. Women tend to work within shorter distances from the home and tend to use public transport more. Therefore, if a country decides to focus on creating and improving its public transport system, it will influence the energy use per capita of men and women differently.

D. Health Issues Related to Energy and their Gender Dimension

In most developing countries women experience energy poverty more severely than men. Their role is often more associated with household activities and they are often the ones that have to spend most of their days in time-consuming and physically difficult tasks of collecting biomass fuels and are thus prohibited from using their time, on other activities, such as going to school or working in a wage earning activities.

At the same time cooking indoors with biomass and other fuels such as coal, charcoal, wood and dung has particularly negative effect on the health of women and girls. It is estimated that this causes 85% of all deaths attributed to indoor air pollution, which are estimated to be about **2 million deaths per year globally**. "In fact, illnesses from indoor pollution result in more deaths of women and children annually than HIV/AIDS, malaria, tuberculosis and malnutrition combined. Other important direct health impacts from dirty energy use and indoor pollution include life-long or chronic disease such as asthma; burns to children; injuries to women from carrying wood; and increased violence against women and girls because of lack of street lighting at night."

E. Energy and Conflict and the Effects on Women

Since the early 1990's, oil producing countries have been about 50% more likely than non oil producing countries to have civil wars.

Paul Collier and Anke Hoeffler have showed[13] that if a third or more of a country's GDP comes from the export of primary commodities, the likelihood of conflict is 22 per cent. Similar countries, that do not export commodities, have a 1 per cent chance. Therefore, there is twenty two times more chance of conflict if you are an oil or gas exporter.

We know at the same time, that fragility and conflict effect women and girls differently from men and boys. Women and girls suffer disproportionately from violent conflicts. They do not only suffer from the by-products of war but also they are often targeted, as a strategy of war. Unfortunately there are many cases in the world where this has been documented.

Conclusions:

In the brief analysis given above, has presented data on the role of women as policy makers in energy and the gender aspects of the energy industry, what happens to sectors of the economy when a country discovers large hydrocarbon deposits, the different profiles of men and women as consumers of energy, health issues related to energy and how the discovery of hydrocarbons greatly increases the possibility of a conflict. In all of the above, the gender aspects of energy have been quite profound and quite different.

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12 http://www.sciencedirect.com/science/article/pii/S0301421509005977#

13 http://economics.ouls.ox.ac.uk/12055/1/2002-01text.pdf

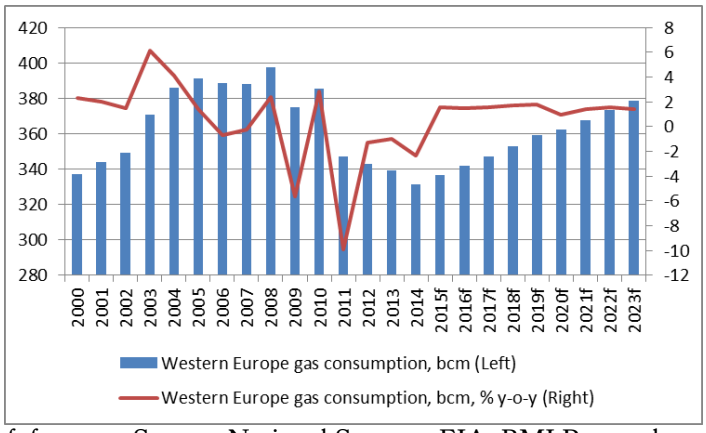
It can therefore be concluded that it is critical to consider the gender aspects of energy policy, both in order to take into consideration women's needs and capabilities as well as women's skills and expertise. There is enough empirical evidence to say that failing to do so is promoting patriarchy and at the end of the day, does not make neither economic nor social and political sense.

The Great Convergence: Global Gas Markets And Western European Consumption

Marina Petroleka

Western European natural gas consumption will be lower in 2024 than it was in 2003 according to forecasts by BMI Research. This will be in spite of small annual gains in consumption between now and 2024. Total gas consumption in Western Europe will rise by a mere 40billion cubic meters (bcm) in the ten years between 2014 and 2024 according to the same forecasts.

Graph 1: WESTERN EUROPEAN GAS DEMAND



f=forecast. Source: National Sources, EIA, BMI Research

This is a significant undershooting of the expectations that policy makers and the European energy industry held in the beginning of the 2000s for the rise of natural gas in Western Europe for the coming decades. But most importantly, it has implications for planned investment programmes in the European gas space, including new LNG import terminals and trans-continental gas transmission pipelines. A key question needs to resonate in policy and industry players alike when contemplating new gas transportation capacity: Where is the demand?

Even if the above projections fall short of future consumption, the fact that European gas consumption in 2014 was 60bcm lower (based on historical data from the EIA) than it was in 2004 underscores the tremendous demand destruction that the European gas space has undergone. For many of the planned investment projects to be deemed viable Europe will need to make up for the demand lost over the previous decade, and then some.

If existing import capacity will be sufficient, the rational for new, large-scale capacity becomes questionable.

- The TAP pipeline, due to come online in 2019, has gained a first mover advantage and will capture part of the new volumes that may be demanded, by bringing 10bcm initially into the European markets, to be scaled up to 20bcm by the late 2020s.
- There is plenty LNG import capacity sitting idly that could accommodate another 20-25bcm by the end of this decade.[14] But other mega-projects like the proposed Turkish Stream, with a proposed 60bcm capacity (most of which admittedly diverted from Ukrainian networks) will struggle to find a market in Western Europe.
- In addition to the Turkish Stream, proposals are resurfacing for revitalising the Nabucco-West project, which was also seeking to bring Caspian gas to the European markets.
- Likewise, new LNG terminals will be subject to the same market reality as new pipelines.

With Turkish Stream and TAP there is a maximum of nearly 80bcm of new pipeline capacity targeting primarily, though not exclusively, Western European consumers. In addition to that, there are just shy of 100bcm of LNG import capacity proposed in Western Europe alone based on BMI Research estimates. A total therefore of 180bcm of new pipeline and LNG capacity for a market that will increase

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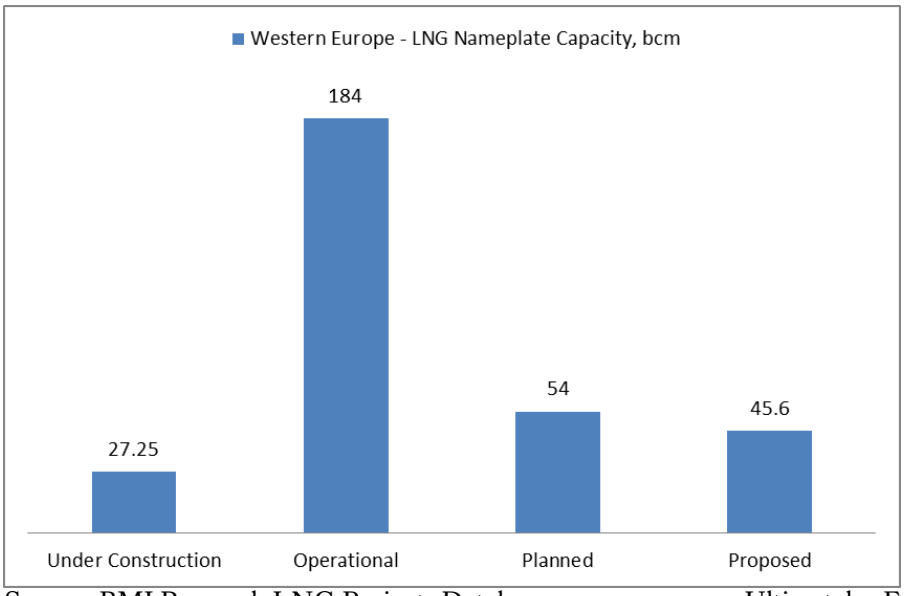
[14] Data covering the period 2009 to 2013 show that the average utilisation rate in European LNG regasification terminals was just 25% in 2013, leaving 75% of nameplate capacity potentially available. Source: "CEER Status Review on Monitoring Access to EU LNG Terminals in 2009-2013", Council of European Energy Regulators, October 2014.

net consumption by a projected 40bcm over the coming decade.

Graph 2: EUROPEAN LNG TERMINALS



Source: BMI Research LNG Projects Database

The price convergence in the global gas markets in recent months will further undermine the economics of large scale gas midstream projects geared towards Western European demand.

With North Asian (Japan, South Korea, China) demand for natural gas tapering, LNG suppliers are no longer reloading cargoes in Europe for shipping to Asia, instead looking to keep more volumes in Europe instead; this oversupply has pushed prices lower. Landing prices in Western European LNG import terminals are only a few US cents lower for April 2015 compared to prices in Asia[15]. This makes Asia almost uncompetitive for aspiring US LNG exporters, who are turning their gaze towards the European market instead. Same with West African and Qatari suppliers. With bountiful new supplies in Asia coming online from Australian mega-LNG projects in 2015 and 2016 (Queensland Curtis, Gladstone, Gorgon, AP LNG) and the demand outlook petering off, LNG prices, especially in the Atlantic basin, will remain under pressure in the coming years. Cheaper LNG cargoes therefore will compete with established oil-indexed gas suppliers in Europe (Norway, Russia, Algeria).

Ideally, low prices should spur demand creating fresh dynamism in the European gas markets.

But the structural problems in the European gas-power market (which makes up more than a third total gas consumption) will persist, thus limiting the demand upside from lower gas prices. It is estimated that for natural gas power generation to be viable in major markets in Western Europe the emissions contract (EU ETS) will have to trade between EUR30 and EUR40/mn tonnes (currently trading at EUR7/mn tonnes). Alternatively, coal prices will have to surge to make the dark/spark spread (the difference between the profit margin for coal versus gas power generation) shift in favour of natural gas. Neither scenario seems plausible in the coming years; the former on policy stalemate, the latter on an oversupply of cheap coal on the global markets.

Ultimately, Europe appears to be entering a situation of low demand and low fuel prices, when LNG import terminals are under-utilised and piped gas is competing with LNG supplies to maintain market share. In a market such as this the economics of a project like the 63bcm Turkish Stream or indeed a revived Nabucco-West would be in the most optimistic scenario on very thin margins. On the LNG side the plethora of proposed terminals in Western Europe would struggle to yield commercial benefits for their sponsors.

The energy security parameter remains a pivotal consideration for European policy makers and is driving the momentum behind the gas and electricity transmission projects, especially those for Eastern Europe. Nearly EUR650mn has been disbursed by the Connecting Europe Facility for the European Commission's Projects of Common Interest (PCIs).[16]

Notwithstanding the energy security dividends new infrastructure will provide, especially for Europe's eastern frontier, the rapidly shifting realities on the ground are creating (for the first time in decades, perhaps ever) an abundance of cheap gas available to the European markets. Projects that aim to ameliorate internal flows (including reverse flows) regional interconnectors, as well as expanded storage - in line with the aims and objectives of the Energy Union and the Third Energy Package- seem at this point to be the most commercially viable and scale-appropriate

[15] US Federal Energy Regulatory Commission - Market Oversight, http://www.ferc.gov/market-oversight/mkt-gas/overview/ngas-ovr-lng-wld-pr-est.pdf

[16] For a full list of the Projects of Common Interest see - https://ec.europa.eu/energy/sites/ener/files/documents/2013_pci_projects_country_0.pdf

projects for the future European gas market, than planned and proposed mega-projects that would run a high risk of remaining idle.

DISCLAIMER

The views expressed in this Newsletter are strictly those of the authors and do not necessarily reflect those of the European Centre for Energy and Resource Security (EUCERS), its affiliates or King's College London.

ACTIVITIES

On February 24th, 2015 at the War Studies Department of King's College London the European Centre for Energy Resource Security (EUCERS), together with the Institute for Strategic Dialogue and the Konrad Adenauer Foundation (KAS) in London hosted the first roundtable discussion - "**Iran as a Re-Emerging Energy Superpower: Obstacle, Opportunities, Impact**", of the 2015 Energy Talk Series on "(Re-) Emerging Energy Superpowers".

(From left: David Jalilvand, Dr Frank Umbach, Alistair Burt MP, Professor Friedbert Pflüger, Professor Jonathan Stern and Kalina Damianova)

Professor Dr Friedbert Pflüger, Director of EUCERS and chair of the discussion, opened the debate, emphasising on the enormous energy wealth of Iran, making it a remarkably interesting topic to begin the 2015 EUCERS/ISD/KAS Energy Talks on *"Re-Emerging Energy Superpowers"*, which also envisage discussions on Kazakhstan, Iraq, Brazil and others. In relation to the event on Iraq, Professor Pflüger mentioned EUCERS cooperation with the Iraq-EU Energy Centre. He also announced a new EUCERS' project on Kazakhstan and the EU, conducted jointly with the Nazarbayev University and supported by the KAS.

Due to various internal and international factors, the world's 4th largest crude oil and 2nd largest natural gas reserves holder and geo-strategically located Iran, has failed to successfully exercise its energy potential domestically and internationally. However, in case of lifting of the international sanctions imposed on Iran due to its not transparent nuclear programme, the eventually re-integrated Iran into the energy markets, if not in the short, but in the longer term will have crucial economic and geostrategic implications for Europe and internationally.

In this regard, Professor Pflüger expressed positive hopes that the Iranian President Hassan Rouhani's government was orientated towards reaching a final nuclear deal. The EUCERS' Director concluded with posing to the panel the key pending questions regarding Iran: *What is expected from the International Nuclear Negotiations?* and *What will the implications of a re-integrated Iran in the global energy markets be for Europe and internationally?*

(On the photo: Professor Pflüger introducing Ms E. Hassanzadeh's book)

Mr Alistair Burt MP and former Parliamentary Under Secretary of State at the Foreign and Commonwealth Office (FCO) responsible for FCO policy on the Middle East began his statement by acknowledging that after suffering many cataclysms in their long history, the UK-Iran relations were now in tasting phase and had to undergo a gradual healing process. Later in the discussion, he reiterated that the UK was looking forward to having positive outcome of the nuclear talks and seeing a re-emerged Iran, playing a key role for the stability in the Middle East.

In this regard, Mr Burt addressed the issue concerning Iran's *identity*, questioning whether Iran would emerge as a power taking part in a structured world of rights and responsibilities or it would remain a regime exercising its influence being a counterpole to that structure. According to Mr Burt the greater identity question is a debatable issue within Iran, determinative for the outcome of the nuclear talks, the realisation of Iran's energy potential and the improvement of its overall economy. Given Iran's controversial position in the Middle East, its future *role in the region* was another matter Mr Burt questioned. Being aware of the complexity of the leadership in Iran, also in many ways highly democratic, because many people were taking part in the internal debates, he reiterated that important was Iran's final decision on how it would use its influence in the region and internationally. Finally, Mr Burt outlined another debatable issue concerning what other powers, such as the US or Saudi Arabia were *expecting from a re-emerged Iran* and what impact it would have on some of the regional balances, leaving the questions open to interpretation.

Professor Jonathan Stern, Chairman and Senior Research Fellow at the Natural Gas Programme, Oxford Institute for Energy Studies, took the case of the Iranian gas exports, basing his arguments on Ms Elham Hassanzadeh's book *Iran's Natural Gas Industry in the Post-Revolutionary Period Optimism, Scepticism, and Potential.* Although there has been a massive increase in Iran's gas production, the even faster rise of its domestic demand and the effect that the subsidies have on lowering the gas prices make Iran unable to export any significant amount of gas at least until 2030. Additionally, as pointed out in Ms Hassanzadeh's book, the domestic elites had strong economic grounds to oppose gas exports, since the natural gas usage for reinjection into oil fields and for the petrochemical development produced the biggest economic return from gas to the state. According to Professor Stern even if the sanctions are lifted, the domestic issues resolved and significant foreign investments made, it will still take 20 years for Iran to emerge as a major gas exporter. Within 10 to 15 years Iran most probably will export modest amounts of natural gas to its neighbourhood, with Iraq and Pakistan being the most realistic destinations. Although Professor Stern remains sceptical about the gas exports, he envisages the Iranian oil exports to have a greater impact to the energy markets, since the lifting of the sanctions will have an immediate effect on Iran's oil sector.

Dr Frank Umbach, Research Director, EUCERS, King's College London, voiced similar to Professor Stern concerns about Iran's gas exports, highlighting that due to *domestic gas shortage* Iran might not even be able to fulfil its plans to export to Iraq and Oman, particularly during the winter times. Additionally, he stressed that if there were lifting of the sanctions, it would be *a gradual process*, which would not have immediate effect on the gas exports. However, even in case of fast sanctions alleviation, he envisaged that with the remaining domestic challenges it would take approximately 5 years to have larger Iranian gas exports. Regarding the *pro and against gas exports debate* within Iran, Dr Umbach stressed that although in Iran there were some interested parties, the exports should not be overestimated at least on the short to midterm. Comparing the internal discussion to the one taking place in the US, he explained that in Iran it encompasses different school of thoughts and added that the complexity of the matter was not entirely transparent to the public.

In terms of oil, Dr Umbach was not very optimistic either, arguing that in the *worldwide oil competition* the *energy efficiency*, absent in Iran, was becoming an increasingly important factor. Furthermore, he suggested that the oil prices decline would negatively affect Iran's oil sector, as the Iranian oil exports had already decreased.

Mr David Jalilvand, a PhD candidate at the Berlin Centre for Caspian Region Studies, researching energy and political economy of Iran, confirmed the previous speakers' statements that Iran benefits of domestic gas allocation. However, he added that exporting gas might have *strategic advantage* for Iran, as it created stronger relations with its customers, making gas exports a more attractive idea to the foreign policy makers in Iran. He further mentioned that the Iranian energy industry would also benefit from the *higher and stable income* from the foreign consumers, contrasting to the lower and delayed payments of the domestic ones.

Concerning the oil prices drop, he suggested that since the share of oil and gas revenues in the Iranian budget was about 30% and it would be decreased to *about 20% in the next budget* starting from March the 21st, the difficulties stemming from the prices are considerable but should not be overestimated at the same time. Moreover, he hinted that the new budget would be based on *an oil price of $72* and some non-tax paying semi-governmental companies would now have to pay their share of taxes. To the comment made by Mr Duero on the importance of the increasing Iran's exports of natural gas in the *form of electricity*, Mr Jalilvand added that Iran had also increased its *petrochemical exports*, thus improving the balance of its non-oil trade. Mr Jalilvand agreed with the panel that in the upcoming years no major volumes of export were expected, except small ones to Iraq and perhaps Oman and Pakistan.

Ms Kalina K. Damianova, KAS Fellow at EUCERS, conducting a study on Iran as a re-emerging energy superpower, added that *the degree of competitiveness* of the expected *new Iranian oil contracts* also gained key significance. Given Iran's historically inherited reluctance to grant foreign companies access to its energy sector, the extent to which the new legal terms will be satisfactory to the international private sector is *determinative for the attraction* of the international oil companies in the crucially needing modernisation Iranian energy sector, whose improvement is a key step to any future exports.

As other challenges remained on the domestic level, Ms Damianova added that the *sable and transparent implementation* of the expected legal reform would actually mark the substantial improvement of the business environment. She hinted that the possible deepening of the EU-Iran energy relations, might also suggest *political and security implications* for Europe. Since Iran has been recently discussed as an ascending power, Ms Damianova stressed that power should also entail *responsibility* and concluded questioning how this responsibility would effectively contribute to the stability and security.

Due to technical and political obstacles, reaching and developing Iran's full energy and export potential might take decades. However, with regard to the encouraging signs of potential reconciliation between Iran and the international community, the 2015 EUCERS/ISD/KAS workshop on Iran discussed the *obstacles* facing the current situation and the *opportunities* that might arise in the future, in order to help predicting the geostrategic *impacts* for Europe.

The roundtable discussion was followed by Q&A, initiating a vivid debate between the panel and the participants counting to more than 60 people - representatives of the government, the private sector and the academia. The full video coverage from the event can be found on our YouTube Channel. The provided reception afterwards, allowed the debate to continue over some wine and aperitifs.

The event was dedicatedly organised by the EUCERS's team, with the leading role of Carola Gegenbauer, Operations Coordinator.

By Kalina K. Damianova, KAS fellow at EUCERS

ANNOUNCEMENTS

We would like to announce that EUCERS Research Director, Dr Frank Umbach, has accepted the offer of the DiXi Group to become a member of their Supervisory Board.

The DiXi Group is one of the leading Ukrainian think tanks focusing on research and consultations in the fields of policy, energy security and investments since 2008. The Group is an influential actor in Ukraine and has recently also established a liaison office in Brussels.

We congratulate Frank for this position and hope for a fruitful cooperation between EUCERS and the DiXi Group.

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The 2nd EUCERS/ISD/KAS Energy Talk on **"Kazakhstan as Emerging Energy Superpower"** will take place on 20th of April 2015 from 9-11.00, followed by a lunch and a panel on **"EU-Kazakhstan Relations"** from 12-14.00 at King's College London. In order to attend please RSVP to carola.gegenbauer@kcl.ac.uk or call 020 7848 1912 for more information.

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Report on EUCERS/ISD/KAS Energy Talks 2014 "**Changing Political and Economic Dynamics of Global Energy Flows**" is out now and can be downloaded from www.eucers.eu

EUCERS ON THE ROAD

Our team represents EUCERS at various conferences and events all over the world. This section gives a regular update and overview of conferences and interview contributions by EUCERS Director Professor Dr Friedbert Pflüger, Associate Director Dr Adnan Vantansever and Research Director Dr Frank Umbach.

24.03.2015 Brussels, Belgium	The 2nd Transatlantic Energy Conference organized by Associated European Energy Consultants (AEEC) and LeClar Ryan on "Common Grounds and Challenges for the Energy Industry – Is it Time for a Closer Cooperation between the U.S. and the EU?" included a presentation by Friedbert on "Russia, Middle East & Turkey - geostrategic starting points for a common U.S. & EU energy policy approach".
23.03.2015 Berlin, Germany	Friedbert gave a summary statement at the 2nd German-Polish Energy Forum.
20.03.2015 St. Gallen, Switzerland	Frank presented on "Energiesicherheit: Aktuelle Entwicklungen in Europa" (Energy Security: Present Developments in Europe") at the "Erdgastagung 2015: Roadmap Gasversorgungsge¬setz" ("Natural Gas Symposium: Roadmap of Gas Supply Law"), at the University St. Gallen
18.03.2015 Vienna, Austria	Frank talked on "Strategic Trends and Challenges of International Energy Security" at the annual NATO Strategic Foresight Analysis Workshop „ Forging the Future Leading NATO Military Transformation", organized by Organized by Allied Command Transformation, Norfolk in partnership with the National Defence Academy
11.03.2015 Abu Dhabi, UAE	Frank presented on the "Effects of the Russian-Ukrainian Conflict on International Oil Markets" at the International Symposium: "Current Oil Market Developments and Their Impact on the Gulf Cooperation Council (GCC)", organised by the Emirates Center for Strategic Studies and Research (ECSSR),
02-04.03.2015 Berlin, Germany	Frank gave four presentations at a Bundeswehrseminar on international, European and German Energy Security, at the Wanseeforum.
4.03.2015 Berlin, Germany	The Federal Academy for Security Policy (BAKS) together with the German-Arab Friendship Association (DAFG) held a joint conference on "Security of Energy Supply – The political and economic significance of a partnership with the Arab world" where Friedbert spoke at a session on "What significance have oil and gas from the Arab world for the energy supply in the future".
23.02.2015 Oxford, UK	Friedbert gave a presentation on ""Who to Call in Europe? The Future of EU Foreign Policy"" at a panel discussion organized by the YouthEPP London Group at the University of Oxford.
05.02.2015 Berlin, Germany	Frank participated at the Round Table Discussion with the CEO of Naftogaz Ukraine, Andriy Kobolyev in Berlin
29.01.2015 Berlin, Germany	Friedbert gave a presentation on "Energy and Water" at the GHORFA – Arab-German Business Day in Berlin on „Oil Price Decline: Conspiracy or Market Forces?".
28.-29.01.2015 Berlin, Germany	Frank was a panelist at the Round Table Discussion "Obstacles in International Nuclear Decommissioning and Ways to a Truly International Community" and Discussion Leader of the Round Table Session: "Preparing Decommissioning" at the 3rd Annual "International Nuclear Decommissioning Summit", organised by the International Quality & Productivity Center (IQPC).

PUBLICATIONS

Prof Dr Friedbert Pflüger and Dr Frank Umbach share with us their most recent publications and interviews:

Frank published a chapter on "The Energy Security of Japan after Fukushima 3/11", in: Espen Moe/Paulf Midford (Eds.), 'The Political Economy of Renewable Energy and Energy Security. Common Challenges and National Responses in Japan, China and Northern Europe' (Houndmille/Basingstoke-New York: Palgrave-MacMillan 2014), pp. 46-66.

Frank talked about the strategic relevance of the TANAP gas pipeline and the start of its construction in: "Baubeginn bei TANAP: Türkei positioniert sich als europäische Energiedrehscheibe" ("Start of construction at TANAP: Turkey positions itself as the European energy hub"), in: Deutsch-Türkische Nachrichten, on 16 March 2015 (http://www.deutsch-tuerkische-nachrichten.de/2015/03/509972/baubeginn-bei-tanap-tuerkei-positioniert-sich-als-europaeische-energiedrehscheibe/).

Frank gave an interview to the perspectives of Iran as a global gas player in: Tom Hoskyns, 'Iran Unlikely to be Global Gas Player before 2030', Interfax-Natural Gas Daily (www.interfaxenergy.com), 26 February 2015, pp. 1-2

Frank gave an interview on Russia's redirection of its gas exports to China in: Annemarie Botzki, 'Russia's Eastern Tilt Will not Hit European Supplies', Interfax-Natural Gas Daily, 17 February 2015

Friedbert wrote an article on "Peace through Gas – Europe needs an affordable and reliable flow of gas, Russia a stable demand", published in The Security Times – Challenges on February 9, 2015, and available at http://www.german-times.com/index.php?option=com_content&task=view&id=44160&Itemid=25.

Frank spoke on the geopolitical impacts of falling oil prices with Nora Marie Zaremba, in 'Die Ölpreis-Revolution: Wie billig kann der Rohstoff noch werden?', Green-Wirtschaftswoche (wiwo), 4 February 2015.

Frank gave an interview on the EU's 'Energy Union' in: Anca Gurzu, 'No Energy Union without Robust Governance', Europolitics, No. 5022, 3 February 2015, p. 8 (Insight).

Frank spoke on Russia's new "Turkish Stream" Gas Pipeline in: Matthias Auer/Eduard Steiner, 'Die neue Ukraine am Bosporus', Austrian newspaper Die Presse am Sonntag, 1 February 2015, p. 19.

Frank published on "Ukraine's Future Energy Security Lies in Europe and the EU", with the Geopolitical Information Service (GIS - www.geopolitical-info.com), 27 January 2015, 4 pp.

Frank gave an interview on Russia's new "Turkish Stream" Gas Pipeline in: Eduard Steiner, 'Moskau will Gas nur noch über die Türkei schicken', German newspaper 'Die Welt' (Germany), 27 January 2014, p. 10.

Friedbert wrote an article for energypost.eu on "Oil price decline: no room for conspirators", on 26. January 2015, available at http://www.energypost.eu/oil-price-decline-room-conspirators/

Frank published on "Ukraine Pressured on Price in Gas Deal with Russia and the EU", for the Geopolitical Information Service (GIS - www.geopolitical-info.com), 19 January 2015, 4 pp.

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If you have found our Newsletter interesting, wish to hear more about our activities, or, indeed, contribute with ideas or essays, please contact Carola Gegenbauer, Operations Coordinator EUCERS on carola.gegenbauer@kcl.ac.uk or call 020 7848 1912.

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