EUCERS Newsletter

Newsletter of the European Centre for Energy and Resource Security (EUCERS) **Issue 53, April 2016**

Introduction

Dear readers and friends of EUCERS,

It is my great pleasure to welcome you to the latest edition of the EUCERS newsletter.
In this edition, we present you with two articles. In the first article, Luca Bergamaschi, a policy advisor at the research and consulting organisation E3G, draws the connection between energy security, climate change and the current migrant crisis, outlining how these issues can be tackled within the new European Global Strategy, to be adopted in June 2016.

In the second article, Dr. Mamdouh Salameh, an oil economist and World Bank consultant, outlines what he views as a failed strategy by Saudi Arabia to maintain its market share in global oil. We would be happy to hear your comments on his provocative opinion piece.

Furthermore, the newsletter will inform you about the recent activities at EUCERS, including a report on the second EUCERS/KAS/ISD Energy Talk this year, which focused on the future of the oil price. Feel free to keep us informed about your research projects and findings as we look to remain at the forefront of new knowledge and innovative ideas.

Thank you for your interest in EUCERS and for being part of our community.

Yours faithfully,
Thomas Fröhlich

In this Month's Edition:

How climate change is endangering European security

By Luca Bergamaschi

Europe's security rests on its neighbours' long-term stability. However, as the immediate political debate focuses on short-term crises, long-term priorities risk being ignored. European leaders need to better understand the interlinkages between climate change and security, as well as the full economic and security value of future-oriented investment. The first step could be to put a new approach to energy and climate change in line with the Paris Agreement at the heart of the new European Global Strategy.

Luca Bergamaschi is a Policy Advisor in E3G's London office, where he works on European energy infrastructure and EU external policy in the context of the energy transition. He focuses on electricity and gas infrastructure, and how the EU's foreign and defence policy can deliver energy and climate security.

Five years ago, as the Arab Spring sparked the streets of Tunis and Cairo, European leaders hoped that a new phase of democracy and political reforms across the Middle East and North Africa (MENA) region would begin. They could hardly have imagined that popular and largely non-violent demonstrations would be followed by the degree of instability Europe faces today: civil wars in Syria and Yemen, the rise of the self-declared Islamic State of Iraq and the Levant, authoritarian rulers in Egypt and Turkey, the collapse of the central government in Libya, and the tremendous wave of migrants landing regularly on the shores of Europe.

Since then, the mood of European leaders towards the MENA region has moved towards a more defensive stance. The main goal today focuses on limiting damages and delivering quick wins against the rise of domestic anti-establishment and largely populist parties. The biggest risk, however, is to fail to deliver long-term stability across the region, with dire consequences for European security. This requires a deeper understanding of the root causes of instability as well as identifying high-impact investments in future stability.

As the region just suffered the worst drought in 900 years, the potential for large-scale disruptions of food systems and potential conflicts over water resources dramatically increases.[1] One of the main drivers of instability in the MENA region has been a decline in living conditions driven by increased food and water insecurity.[2] The region uses the equivalent of another Nile in "virtual water" each year embodied in food imports, as most Arab countries import half of their food supplies.[3] This makes them acutely vulnerable to external drivers of instability, such as volatility in global prices.

It has been estimated that climate change made the extraordinary Russian heatwave of 2010 three times more likely, leading to a collapse of Russia's wheat harvest and a sharp rise of the price of wheat on global markets.[4] The record high food and oil prices in 2010, combined with the inability of government subsidies to absorb the price shocks, drove hundreds of thousands of people to the streets.[5] Today, these fiscal pressures have been replaced by reduced budget revenues from low oil prices, which further increase the risk of popular unrests from social spending cuts.[6]

These trends are likely to worsen over time: Major import crops, such as wheat, are likely to increase in price by up to 80% by 2030 due to growing global demand; climate change could increase prices by a further 40%.[7]

Less security without climate security

According to the Center for Naval Analyses' Military Advisory Board, "climate change impacts are already accelerating instability in vulnerable areas of the world and are serving as catalysts for conflict".[8] Climate change has been linked with the set of extreme weather conditions which have fuelled many of the stresses underlying broader stability in the MENA region. For example, prior to the civil war in Syria, extreme drought

[1] NASA (2016), Drought in eastern Mediterranean worst of past 900 years
[2] M. Lagi et al. (2011), The Food Crises and Political Instability in North Africa and the Middle East
[3] J.A. Allan (1998), Virtual Water: A Strategic Resource Global Solutions to Regional Deficits
[4] K. E. Trenberth and J.T. Fasullo (2012), Climate extremes and climate change: The Russian heat wave and other climate extremes of 2010
[5] M. Lagi et al. (2011), The Food Crises and Political Instability in North Africa and the Middle East
[6] See for example the case of Algeria in I. Fakir and D. Ghanem-Yazbeck (2016), Running Low: Algeria's Fiscal Challenges and Implications for Stability
[7] Oxfam (2011), Growing a better future
[8] CNA (2014), National Security and the Accelerating Risks of Climate Change

conditions drove as many as 1.5 million people from the country's breadbasket region in the northeast to urban peripheries of the south.[9] Temporary settlements, composed largely of displaced rural people, formed on the outskirts of Damascus, Hama, Homs, Aleppo, and Dara'a – the latter being the site of the first significant protest in March 2011. This migration flow exacerbated economic strains already caused by nearly 2 million refugees from neighbouring Iraq and Palestine.[10]

If European leaders want to succeed in staving off disorder in the MENA region, they need to recognise the interlinkages between climate change, economic development, and security. Because the MENA region faces disproportionate challenges from climate change, investment and development strategies must directly address key vulnerabilities and focus on sustainable growth and jobs.

However, between 2003 and 2012 the fossil fuel and non-tradable sectors of the MENA countries received twice the level of Foreign Direct Investment than the non-fossil fuels and commercial sectors.[11] If the current approach to energy investment in the MENA region continues, the risks of instability could further increase as fossil fuels infrastructure would lock in high carbon emissions, and thus dangerous climate change, while exposing the countries to price volatility risks and fiscal pressures. As Europe decarbonises its energy system and develop new technologies, it will be less dependent on fossil fuels imports and infrastructure, and more on clean consumers and technology markets to stay prosperous.

Delivering the Paris Agreement and the 17 Sustainable Development Goals (SDGs) will help address some of the key challenges as they require a fundamental shift of investment and diplomatic priorities towards low carbon and resource efficient technologies. The European external support should be set in line with the delivery the long-term goal and the countries' climate and energy commitments under the Paris Agreement – known as the Intended Nationally Determined Contributions[12] – as well as the SDGs. Refocusing priorities on resilient investment over decarbonisation and sustainable development could bring multiple security and economic dividends for both the MENA countries and European citizens and businesses.

In June 2016, European leaders will adopt a new European Global Strategy. This will be a key opportunity for the European Commission and Member States to work together to develop a broad framework for delivering long-lasting stability in the MENA region. This framework needs not only to look at short-term challenges but at the longer-term too. Putting the delivery of the Paris Agreement and the SDGs at the heart of the strategy will help Europe and its neighbours remain safe and invest in future prosperity.

[9] C. P. Kelley et al. (2015), Climate change in the Fertile Crescent and implications of the recent Syrian drought
[10] S. Mohtadi (2012), Climate change and the Syrian uprising
[11] World Bank (2013), Middle East and North Africa Economic Developments and Prospects
[12] UNFCCC (2015), The Paris Agreement

Saudi Arabia's oil strategy has backfired

By Mamdouh Salameh

Saudi Arabia has been instrumental in the collapse of the crude oil prices by its decision not to cut production and also prevailing on OPEC not to do so. The crude oil price has lost 70% of its value since September 2014 and there are no indications that it will stop in the absence of a major production cut by OPEC. It is not inconceivable that the price could even slide again to $30 a barrel. An oil glut mainly caused by OPEC members producing more than 2.3 million barrels a day (mbd) above their agreed production ceiling of 30 mbd resulted in the severe oil price drop. This was exacerbated by OPEC's decision not to cut production to stem the glut in the market and by Saudi Arabia's strategy to defend their oil market share.

Dr. Khalid Al Sweilem, former Chief Counsellor and Director General of Investment at the Saudi Arabian Monetary Agency (SAMA) and now a fellow at the Harvard Kennedy School, described the Saudi decision to flood the global oil market as a gamble with barely hidden intentions to limit Iran's and Russia's market share. Obstructing the expansion of US shale oil production also takes a big toll on Saudi Arabia's financial wellbeing.[1]

Saudi global oil strategy is currently driven by four major objectives.

(i)- Defending Market Share

Saudi oil minister Ali Al Naimi said Saudi Arabia and OPEC were defending their market share which justified the decision not to curb production. "If they have cut their production, the price will go up and the Russians, the Brazilians and US shale oil producers will take Saudi and OPEC share".[2] But the flaw in Mr Naimi's argument is that if every producer tries to defend their market share at a time of glut, they all exacerbate the oversupply and suffer from price drops.

Furthermore, neither Russia nor Brazil or the United States is in a position to usurp any market share from Saudi Arabia or OPEC. Russia is facing difficulties raising its production beyond the current level of 11 mbd, while Brazil is struggling to meet its own oil needs whilst US shale oil production is in decline and could hardly increase enough to substantially expand its current market share.[3]

Moreover, even if Saudi Arabia managed to increase its market share by 5% amounting to 500,000 b/d, this could only add some $7 bn to its revenue at current oil prices. Meanwhile, the loss of revenue resulting from the current low prices amounts to $161 bn.[4] Common sense would argue that Saudi Arabia should cut its production and let OPEC do likewise in order to control their losses.

(ii)-Containing Iran

Saudi Arabia is weary of Iran's influence in the region, especially after the nuclear deal. Since it not only distrusts Iran's nuclear intentions but also because of its involvement in Syria, the traditional rivalry between the two countries for pre-eminence in the Gulf region and in OPEC has become more apparent recently.

By flooding the oil market Saudi Arabia caused a steep decline in the oil price with the objective of preventing the resurgence of Iran's oil industry and generally slowing Iran's economy. To balance its budget, Iran would require a price of oil of $130 a barrel.[5]

(iii)- Pre-empting Iran's & Iraq's Demand for Bigger Production Quotas

Even before the end of the sanctions, Iran is already demanding a higher production quota from OPEC. It is very unlikely that Saudi Arabia and its allies inside OPEC will agree to that, since Iran has not managed to

Dr Mamdouh G. Salameh is an international oil economist, consultant for the World Bank, technical expert for the United Nations, and a visiting professor of energy economics at the ESCP Europe Business School in London.

[1] Interview with Khalid Al Sweilem, Daily Telegraph, 28 December, 2015.

[2] Mamdouh G Salameh, "What Is Behind the Steep Decline in Crude Oil Prices: Glut or Geopolitics?", Arab Centre for Research & Policy Studies, Doha, Qatar, June 2015, p. 2.

[3] International Energy Agency: Oil Market Report, 11 March 2016.

[4] Calculated by the author on the basis of Saudi crude oil exports of 7 mbd, a current oil price of $37/barrel and a price difference of $63/barrel between the current oil price and the price before its collapse.

[5] Wall Street Journal, OPEC Members Nearing Compromise on Supply Cuts, 24.11.2015.

achieve its production quota of 4 mbd since 2000 and, therefore, lacks justification to increase their quota.

Iraq's production now exceeds 4.18 mbd with exports at a record 3.28 mbd. Given political stability and continued investments, Iraq would be capable of producing 7-8 mbd by 2020/2021 thus emerging as the biggest rival to Saudi Arabia.

This would require Saudi Arabia – which accounts for a third of OPEC's production –to make concessions to its own production. With its undiversified economy, it is unlikely to lower its production significantly resulting in a crucial test for OPEC.

(iv)- Countering US Shale Oil Production

Citing a 75% drop in the US shale oil rig count from 1609 to 402 between October 2014 and March 2016, Saudi Arabia seems to be achieving this goal. But rather than completely disrupt and stall US shale oil production, this competition in price has made US shale oil more resilient. The break-even price for US shale oil production is reported to have declined from $70-$85/barrel to an estimated $60 per barrel now with a realistic prospect to fall below $50.[6]

What could eventually slow down or disrupt US shale oil production is not Saudi Arabia or OPEC but geology and the rising debt of shale oil producers amounting to $200 bn. Shale oil wells experience much faster decline rates than conventional oil wells amounting to 70%-90% in the first year of production. This means shale oil producers must replace 40%-45% of the current production each year just to maintain production. The US will need to drill more than 9,000 wells annually at a price of $50 bn to counterbalance production declines. Still, once oil prices start to rise, shale oil will return to the market.

Impact of Saudi Oil Strategy on the Country's Finances & Currency

Saudi Arabia could be the biggest casualty of its own oil strategy. Saudi 2015 and 2016 budgets have shown huge deficits amounting to $140 bn and $134 bn respectively. The 2016 budget also showed that the country's earnings in 2016 are forecast at $137 bn against a spending of $224 bn.

The rapid depletion of Saudi foreign exchange funds is rather alarming. During 2015 the Kingdom's central bank reserves dropped from $732 bn to $623 bn in less than twelve months. The International Monetary Fund (IMF) warned in October 2015 that Saudi Arabia would run out of money within five years if it did not tighten its belt.

Saudi financial expert, Dr Khalid Al Sweilem, warned that the Saudi Riyal is currently under intense pressure and said there is a real possibility of devaluation or floating. He even described a "dangerous loss of confidence in the Saudi riyal".[7]

Oil as a Weapon? A Step Too Far

Since the 1970s, Saudi Arabia has used its oil abundance at least four times as an aggressive tool of foreign policy.

Saudi Arabia first played the oil card in October 1973 when Arab oil producers imposed an oil embargo on the United States in retaliation for its support of Israel during the *Yom Kippur War*.

The tactic was so effective that Saudi Arabia ventured to use it again in 1977 to destabilize Iran just as Ayatollah Khomeini mounted his offensive to topple the Shah.[8]

Early in the 1980s, Saudi Arabia applied a similar tactic when Sheikh Ahmad Zaki Yamani, the then former oil minister of Saudi Arabia, flooded the market with 10 mbd of oil causing the oil price to collapse to $10/barrel. It later became public that this was supported by the Reagan administration to use the oil price to expedite the downfall of the Soviet Union.[9]

The Saudis flooded the global oil market again in the fall of 2014. But this time they overplayed their hand. Russian President Vladimir Putin responded by raising Russian oil production to 11 mbd from 10 mbd and focusing on sales to China. Russia has now surpassed Saudi Arabia as the biggest oil supplier to the People's Republic. Meanwhile, by concluding the historic nuclear agreement, Iran is overcoming the burden of economic

[6] e.g. Dan Murtaugh on Bloomberg, 3 February 2016.

[7] Interview with Khalid Al Sweilem, Daily Telegraph, 28 December, 2015.

[8] Andrew Scott Cooper, How Saudi Arabia Turned Its Greatest Weapon on Itself, New York Times Sunday Review, 12 March 2016.

[9] e.g. William R. Clark (2005), Petrodollar Warfare: Oil, Iraq and the Future of the Dollar, Vancouver, Canada: New Society Publishers.

sanctions. This puts another rival outside Riyadh's close sphere of influence.

It is starting to look as if Saudi Arabia's strategy of flooding the markets with cheap oil has backfired.

Instead of following the old, oil-guided strategy, Saudi Arabia focus on the challenges of its society, such as the need to create at least 3 million jobs by 2020, diversify its economy and eliminate wasteful subsidies. All these issues require relatively high oil prices in the short to medium term.

A continued refusal by Saudi-led OPEC to cut production could push prices down to $30/barrel or below. However, were OPEC to cut production by 2 mbd, prices could jump overnight to $70-$80/barrel.

DISCLAIMER

ACTIVITIES

EUCERS/KAS/ISD Energy Talk 2/2016

Oil Prices – How low? How long?

Conference Report

On Wednesday 20th April 2016 the European Centre for Energy and Resource Security (EUCERS) hosted the second event in the 2016 Energy Talks, made possible with generous support by the Konrad Adenauer Foundation (KAS) and the Institute for Strategic Dialogue (ISD). The panellists included: Hans-Hartwig Blomeier, Director of KAS' London office; Professor Friedbert Pflüger, EUCERS Director; Paul Appleby, Head of Energy Economics at BP plc; Marina Petroleka, Head of Oil and Gas at BMI Research, and EUCERS Research Associate; Peter Parry, Leader of the Global Oil and Gas practice and Partner, Bain & Company, and Jose Bolanos, KAS Fellow at EUCERS. The following is a brief summary of the topics discussed.

Professor Pflüger opened the discussion by highlighting the uncertainty that the world and the oil industry are facing. He noted that there was a sense of confidence about the fact that despite its struggles, oil will remain vital for the foreseeable future and expressed concern about a number of aspects that are influenced by the oil price. Amongst them, the consequences of low oil prices for different type of actors, the geopolitical implications of low oil prices, and uncertainty surrounding the ability of some key global players to influence prices. Professor Pflüger finalised by opening the table for all other speakers to provide their input.

Mr. Blomeier extended a very warm welcome to all the participants to the conference. He emphasised the importance of the collaboration between KAS, EUCERS and ISD, and welcomed the opportunity to have high level discussions about these complex topics. By noting that the future of markets is greatly "a matter of faith", Mr. Blomeier brought to mind the key influence that some of those present would have on future events in the energy sector, speakers and participants alike.

Paul Appleby started by bringing attention to the long-term structural aspects that define what the prices of oil are. He noted the difficulties involved in predicting oil prices, and the fact that oil prices will continue to surprise us. Nevertheless, there is still value in learning from the past, as BP does in their statistical outlook, which (among other factors) relies upon a history of oil prices that goes back to 1861. Paul emphasised that the current oil price does not result from one factor but from a convergence of events that took place prior to December 2014, including but not limited to OPEC's decision not to cut supply in November 2014. Paul also addressed the question of whether production will go up immediately if prices recover, or whether a variety of disruptions such as geopolitical struggles will continue to appear as a norm. Paul closed by noting that the norm in the industry is to expect supply and demand to rebalance by the end of the year. At the same time, the industry also expects an extended period of relatively low prices due to the considerable amounts of oil that are currently in storage.

Marina Petroleka started by noting that although predicting oil prices is extremely difficult, the fundamental elements that define oil prices do signal the direction of travel. Marina's participation addressed the question of market rebalancing, which could happen by the end of 2016. This date is sooner than previously expected due to the aggressive fall in prices at the beginning of this year. Having said that, she also addressed the issue of re-emerging production if prices recover by noting that a potential game changing consideration is the flexibility of shale gas production. This could put a roof on future price increases. After referring to different geopolitical factors such as unplanned supply disruptions and Doha's influence on the markets, Marina closed by noting that overall, we can expect to see an increase in the correlation between geopolitical risks and oil prices.

Peter Parry noted that low oil prices are actually positive for consumers, equating to 1.4% GDP growth in the UK. He pointed out that there is no single oil price as producers sell at different prices, depending on the specifications of their oil. A further important consideration is that market volatility is driven by very small changes, which is fundamental due to the fact that all oil companies are under severe pressure to improve and, at a time of low prices, small differentials matter more. Peter then moved the discussion to account for some of the potential sources of future changes. For example, the question of stored oil, which is the fastest available source of oil. A big question posed by Peter in this respect is China's storage capacity, which is

unknown, and future oil prices might be determined by supply rather than demand. The point being made is not to underplay the role that demand has for prices but rather to focus on the fact that demand is fairly predictable. Peter closed his participation by providing three different scenarios about the future of oil prices.

José Bolanos started by noting that it would be necessary to re-state everything said to have a complete picture of the future of oil prices. As such, rather than re-stating statistics he noted the importance of establishing the link between all presentations. This link was the interest in the underlying structural factors that make prices happen, which presupposes a perspective on the past. José considered this to be particularly important because the current crisis is not the first time that the industry faces a glut, or the need to be profitable at low prices. He then linked this to an energy security paradox: affordability toward customers is enhanced with low prices so gluts typically strengthen oil's position in society, but affordability of investment is diminished with low oil prices so companies find it hard to compete. José noted after this that whilst there are certainly many losers, there are also winners, which moves the discussion to a question of 'how to be a winner'. José closed by noting that in this respect, the past shows that the winners tend to be those who dare to have a strategy for times of crisis rather than those who wait for the market to improve.

Questions & Answers (Q&A)

The Q&A section touched on questions pertaining to the impact of the Paris Agreement, the 'future policy' question, the debate about when to expect 'peak demand', and other issues. As per our standard practice Q&A's will be left out of this summary with the objective of encouraging frank and honest debate in future activities.

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ANNOUNCEMENTS

EUCERS Reflections Working Paper Series

We are delighted to announce the publication of EUCERS "Reflections" Working Paper Series Volume 2 (Spring 2016). The volume is dedicated to the EU-Russia-Turkey energy nexus and includes four distinct, yet complimentary, papers that analyse different dimensions of this important three-way relationship.

The publication is now available for download from our website on www.eucers.eu.

KAS Fellowship 2016-17

We are delighted to announce that EUCERS will be running the KAS Fellowship in Energy Security again in 2016-17. The deadline for applications is 1 June 2016.

EUCERS Undergraduate Fellowship

King's Undergraduate Fellow at EUCERS gives undergraduate students the unique opportunity to work with EUCERS. Find out more here http://www.kcl.ac.uk/campuslife/ke/ug-rfs/Student/Student-Home.aspx

EUCERS Executive Energy Seminar 2016 - Save the Date

EUCERS will be hosting the EUCERS Executive Energy Seminar for the fifth time in 2016. The one-week programme will take from 23.-27. May 2016. Please visit www.eucers.eu and navigate to the Executive Seminar page for more information on the programme and the application procedure.

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, Research Director Dr Frank Umbach and Associate Director Dr Adnan Vatansever.

28.04.2016 Baunatal, Germany	Frank gave a presentation on "The German Energiewende Under-Fire. 'Green Energy Island' vs. Common EU-Energy Policy and Global Energy Trends" at the 15. KAS-Seminar together with Viessmann Deutschland GmbH,.
19.04.2016 Berlin, Germany	Friedbert gave a presentation on "Turning points - Eastern Europe in search of new opportunities, Round table II: Energy" at the East-Forum, Berlin.
18.04.2016 – 20.04.2016 Lucerne, Switzerland	Frank consulted and presented as the official "Subject Matter Expert" on "Global Energy Security – Mega-Trends, Challenges and Implications for NATO" for NATO's annual "Strategic Foresight Analysis", Third Interim Update Workshop .
07.04.2016 Brussels, Belgium	Frank presented and participated in a Panel Discussion on "Nordstream 2 – Energy Relations between Russia and the EU: How to Build New Cooperation to Enhance Energy Security of All?" at the seminar of the Brussels Energy Club "Energy Security of the European Union: Which Interdependencies with Third Countries?"
01.04.2016 Washington D.C., USA	Friedbert spoke on "The Future Role of Gas and Transatlantic Policy" at the 3rd Transatlantic Energy Conference.
31.03.2016 New York City, USA	Friedbert spoke on "Russia, the US and Energy Security in Europe" at a breakfast briefing hosted by the American Council on Germany.
28.03.2016 Cambridge (MA), USA	Friedbert gave a presentation at Harvard University 's Weatherhead Center for International Affairs on "European Energy Security: The Role of Russian Gas and US LNG"..

PUBLICATIONS

Raszewski, Slawomir (ed.) "Reflections. The European Centre for Energy and Resource Security Working Papers Series" Vol 2, Spring 2016, EUCERS: London 2016.

Umbach, Frank "Kazakhstan-EU Energy Cooperation Threatens Russian Interests", Geopolitical Information Service (GIS - www.geopolitical-info.com), 12 April 2016, 6 pp.

SOCIAL MEDIA

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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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