



RUSSIA, CHINA AND THE GEOPOLITICS OF ENERGY IN CENTRAL ASIA

Alexandros Petersen with Katinka Barysch





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1 Introduction

Energy has come to symbolise the geopolitics of the 21st century, reflecting countries' diminishing reliance on military and political power. Today, energy is an instrument of geopolitical competition, like nuclear weapons or large armies were during the Cold War. The means of international influence have become more diverse and sophisticated, but the goals remain much the same: national security, power projection, and control over resources and territory.

In different ways energy is fundamental to the rise of Russia and China as great powers. For Russia, possession of vast oil and gas resources fulfils a function similar to its nuclear weapons in the Soviet era. The post-1999 boom in world oil prices has underpinned Russia's re-emergence as a great power. The combination of the country's abundant energy reserves and fast-growing world demand for such resources has given Russia the opportunity to play a more influential role in global politics. When Kremlin officials speak of Russia being an 'energy superpower', they are really saying that it is back as a global, multi-dimensional power. Energy is seen not simply as an instrument of influence in itself, but as underpinning other forms of power: military, political, economic, technological, cultural and soft power.

Energy is no less vital to China, but from the opposite standpoint. China's modernisation and rise as a superpower depends on securing reliable access to natural resources. Beijing has responded to this imperative by making the worldwide search for energy one of foreign policy priorities. Just as Russia will rely on energy exports for the foreseeable future, so China will remain a net importer of oil and other sources of energy, such as gas and nuclear fuel. Energy and geopolitics are as closely intertwined in China's case as they are for Russia, except that for Beijing energy is not an instrument of

geopolitical ambition, but a key driver of an ever more assertive foreign policy.

From an energy perspective, the relationship between Russia and China should be straightforward. Russia is the world's biggest hydrocarbon producer. China is one of the world's biggest and fastest growing energy markets. Moreover, the two are neighbours, which means that energy transport is relatively straightforward, without the need for either risky sea shipments or pipelines that transit several countries. A long-term strategic energy relationship between the two looks not only commercially viable but almost inevitable.

European policy-makers have in the past reacted with concern whenever Russian leaders alluded to the option of 'turning to the east' by redirecting oil and gas flows away from Europe and towards emerging markets in Asia, principally China. For the EU, which relies on Russia for a third of its oil imports and some 40 per cent of its gas imports, such a shift could pose a threat to energy security. The US is equally concerned about an energy link between Russia and China, but for different reasons: it fears that energy could be at the heart of a strategic rapprochement between Beijing and Moscow.

However, as this report shows, the energy relationship between Russia and China is a lot more complex than their respective positions as producer and consumer would imply. In fact, the bilateral energy relationship between the two countries is remarkably underdeveloped. Their main energy interaction is an indirect one, through competition in Central Asia.

Chapter two of this report sketches out the energy interests of Russia and China, which would naturally guide them towards a strong bilateral relationship. Russia is hoping for new markets for its energy since the outlook for gas demand in Europe – by far its most important export customer – is both sluggish and uncertain. China is looking for supplies of raw materials, in particular energy, to fuel its industrial development. Nevertheless, the Sino-Russian energy

relationship remains woefully underdeveloped. Chapter two discusses the reasons why this relationship has not progressed as expected, and why it is unlikely to do so in the foreseeable future.

Chapter three focuses on Central Asia where, China looks set to take over from Russia as the strongest outside player in national energy sectors. The opening of the Central Asia-China gas pipeline at the end of 2009 was only the latest and most vivid illustration of China's growing influence in this energy rich and strategically important region. Although the main focus of the chapter is on the interaction between China and Russia, the interests and actions of the EU and the US in Central Asia are also briefly discussed.

Chapter four then looks at Turkmenistan in particular, as a case study in the new geopolitics of energy. Although Kazakhstan is an equally important energy player in Central Asia, its resources consist predominantly of crude oil while Turkmenistan could be on course to become one of the world's leading suppliers of gas. Oil is a more 'fungible' commodity in the sense that it is sold on open global markets and therefore usually entails less direct commercial and political interaction between buyer and seller nations. Gas is mainly sold on the basis of long-term bilateral contracts and shipped through dedicated pipelines that often cross several countries. In short, the gas business is by its very nature more politicised, and therefore more attention is paid here to the development of Central Asia's gas than its oil.

Turkmenistan is also interesting because it appears to be sliding from total dependence on the Russian market towards predominant dependence on China in a short period of time. Turkmenistan highlights the need for the West to pay more attention to the energy geopolitics of this region. However, Turkmenistan is one of the world's least open countries, with no free press and very little public debate. It thus poses significant challenges as a subject of analysis.

Although Uzbekistan is estimated to have considerable gas resources, it is not a sizeable exporter. It uses most of its gas to

satisfy the fast growing demand of its 28 million population. Uzbekistan is therefore not included in the discussion. Nor are the smaller Central Asian republics, Kyrgyzstan and Tajikistan, which, although posing challenges of their own to regional stability, are not energy players. Instead, the report refers in some places to developments in Azerbaijan, which, although geographically not in Central Asia, is an integral part of the energy balance of the Caspian region. Azerbaijan is crucial for removing obstacles to trans-Caspian energy shipments, which is a precondition for the development of an energy relationship between Europe and Central Asia.

Chapter five draws together the different strands of the analysis and offers some conclusions and recommendations to Western policy-makers. The idea that countries such as Turkmenistan and Kazakhstan are pawns in a new 'great game' between Russia, China and the West is wide of the mark. Reduced Russian influence has given the former Soviet states of Central Asia more room for manoeuvre in formulating and consolidating their own independent energy strategies.

The risk is that these countries may move from over-dependence on Russia to over-dependence on China. Such a development would run counter to Western interests. First, since China appears no more interested in promoting good governance and openness in Central Asia than Russia has been, growing Chinese influence would do little to help the long-term development and stability of this strategically important region. Second, the EU would lose out in the competition for Central Asia energy resources. Since Central Asian gas is an important ingredient of the EU's diversification strategy, this poses a bigger risk to its energy security than Russian promises to redirect energy sales towards Asia. The West, and the EU in particular, should use the window of opportunity that is being created by the weakening of Russia's traditional regional hegemony to establish stronger relations with Central Asia. Energy must be at the heart of such attempts.

2 Russia and China: The puzzling dearth of energy relations

Russia – the energy superpower

Russia has traditionally been the dominant player on the Eurasian energy map. It holds the world's eighth largest crude oil reserves, and its oil production has recovered from a post-Soviet slump to eclipse the oil production of Saudi Arabia. Between the mid-1990s and 2009, Russian oil production grew from around 3 million barrels per day (b/d) to approximately 10 million b/d. Over the same period, Russian domestic oil consumption has remained steady at 2-3 million b/d, allowing Russia to increase its exports to 7 million b/d in 2009.¹

¹ *US Energy Information Administration, 'Country analysis briefs, Russia', November 2010.*

In addition to its generous oil reserves, Russia holds the world's largest natural gas reserves, some 25 per cent of the world's proven total. With 48 trillion cubic metres², Russia's proven natural gas reserves are almost as large as those of Iran and Qatar, the world's number two and three in terms of proven reserves, combined. Russia has consistently been the world's biggest natural gas producer – only to be marginally surpassed in 2009, when the shale gas boom in the US increased that country's production to 566 billion cubic meters (bcm), compared with Russia's 546 bcm. Russia's position as the world's biggest natural gas exporter, however, has remained unchallenged.

² *This report uses cubic metres, the volume measure usually referred to in Europe, rather than cubic feet, as is more common in the US.*

Russia's vast energy resources provide the country with significant power in the 21st century – power that is no less considerable in today's world than the hard military sort. It is not surprising,

therefore, that energy has become central to Russian foreign policy, not only as a source of revenue but also as a source of direct leverage.

The quest for security of demand

Throughout the Soviet period, all pipelines from what is now the Russian Federation were built westward, with Western Europe as the primary destination for Russian oil and gas outside the Soviet space. In recent years, Russian politicians and energy executives have repeatedly announced that in the future more Russian hydrocarbons would be sold eastwards, principally to China. In 2006, the then president, Vladimir Putin, promised that Russia would increase the share of its oil and gas exports going to Asia

³ *Full text: Interview with Vladimir Putin*, *Financial Times*, September 10th 2006.

from a meagre 3 per cent at the time to 30 per cent by around 2020.³ In August 2009, the Russian government adopted its ‘energy strategy 2030’. This document outlined a \$2

trillion investment plan for new fields and transport infrastructure, partly designed to raise significantly the share of oil and gas destined for Asia-Pacific markets.

In part, the planned redirection of exports is the result of the geographical shift of production from the declining giant fields of western Siberia to new deposits further east and north. But Russia’s export diversification strategy also has economic and political motivations. In particular, Moscow highlights the need for ‘security of demand’ and the quest for new markets in an increasingly uncertain global energy environment.

Since Russia sells two-thirds of its gas and a large share of its oil to the EU, the outlook for the European market is crucial for Russia’s economic future. The EU has adopted ambitious targets for the use of renewable energy and energy savings as part of its 2020 climate change strategy. As a result of these policy shifts, combined with overall weak economic growth, EU demand for gas is forecast to grow slowly in coming decades (although Germany’s decision in 2011 to phase out the

use of nuclear power may lead to an upward revision of forecasts for European gas demand). EU demand for oil, meanwhile, is set to fall as higher prices and stricter rules lead to more fuel-efficient vehicles.

Global gas market developments also impact on the outlook for the European market. In recent years, the economic recession, the ‘shale gas revolution’ in the US and a rapid increase in global supplies of liquefied natural gas (LNG) have resulted in a global ‘gas glut’. As the US headed towards self-sufficiency in gas, large amounts of LNG that had been destined for the US market started arriving in Europe. These LNG cargoes sell more cheaply on the ‘spot’ market for short-term gas contracts than the price that European companies pay Gazprom under long-term contracts for pipeline gas. Some of Gazprom’s biggest customers in the EU have therefore put pressure on Russia to lower gas prices and allow more flexibility in bilateral contracts. Russia fears that the traditional model of the European gas trade – long-term bilateral supply contracts that specify minimum volumes and link gas prices to the price of oil – might be breaking down.⁴

⁴ *Katinka Barysch*, ‘Shale gas and European energy security’, *CER insight*, June 2010.

The sluggish outlook for the EU energy market contrasts starkly with predictions for booming demand in China: the International Energy Agency (IEA) forecasts China’s demand for gas to jump from 85 bcm in 2008 to 395 bcm by 2035, whereas European demand is set to grow only incrementally, from 555 bcm in 2008 to 628 bcm by 2035.⁵ What is more, forecasts for European gas demand have been revised repeatedly in recent years, and various energy companies and professional bodies now offer varying projections about where demand is heading. Russia complains that such differences and revisions leave it with too much uncertainty regarding its main gas export market.

⁵ *International Energy Agency*, ‘World energy outlook 2010’, November 2010.

One additional source of uncertainty relates to the prospect of the shale gas revolution spreading from the US to Europe and elsewhere.

⁶ *Gas strategies, 'Shale gas in Europe: A revolution in the making?', Gas Matters, issue March 2010.*

The US National Petroleum Council predicted in 2007 that shale gas resources in Europe could amount to 15 trillion cubic metres – more than double Europe's proven conventional gas reserves.⁶ Potential deposits for unconventional gas span the continent, reaching from the Netherlands to Germany and Britain, while exploration has started in Sweden and, most importantly, Poland. Outside the EU, geologists are confident that both Ukraine and Turkey could produce unconventional gas in the future, which would further change the balance in the European gas market. Of course, the exploration of shale deposits in Europe is only just beginning, while population density, subsoil laws, lack of finance and environmental concerns will slow any possible developments. Nevertheless, if Europe was successful in developing its unconventional gas resources, Russia would face further uncertainties in its main markets.

⁷ *Unless otherwise indicated, quotes are from Alexandros Petersen's discussions with officials and energy sector executives from Russia, Azerbaijan and Turkmenistan in the autumn of 2010. The interlocutors prefer to remain anonymous.*

For Russia, therefore, security of demand means the quest for new markets. As one Russian energy official puts it: "Energy security for us means more export options. We want to have choices, just like you [Europeans] want choices."⁷

The EU seeks to depend less on Russia

It is not only slow projected growth in the traditional European market that worries Russia. The EU is working on an active diversification strategy to buy more gas from other producers since many Europeans consider Russia an unreliable supplier and a country willing to use energy exports for political ends. Such concerns have been heightened since the two 'gas crises' of 2006 and 2009, when Russian-Ukrainian disputes over gas prices, debt and transit fees led to interruptions in gas flows to the EU market. Similar disputes have at times threatened to disrupt the transit of Russian gas and oil through Belarus.

The EU has responded to potential threats to its energy imports stemming from such transit issues by pursuing two types of diversification: first, the EU has sought to diversify sources of supply. It has supported new pipeline projects, such as the 'southern corridor', and its flagship pipeline called Nabucco, to bring Caspian and perhaps Middle Eastern gas directly to EU markets as well as the construction of additional terminals for LNG imports from Africa and the Middle East.

Second, the EU has backed the construction of new shipment routes for Russian gas that do not depend on transit states such as Ukraine and Belarus. The Nord Stream pipeline brings gas directly from Russia's Baltic coast to Germany and from there to the Netherlands and other EU countries. Although Nord Stream is officially an EU 'priority project', Poland and some other Central and East European countries have opposed it. They fear that it will give Russia added leverage over traditional transit countries since they are no longer needed to supply valued customers such as Germany. The South Stream pipeline, a Gazprom-driven project designed to bring Russian gas via the Black Sea into South Eastern Europe, is even more controversial. Many people in the EU think that South Stream is a political project designed to foil plans for a southern corridor. Yet several Central and East European countries (at least on paper and perhaps under Russian pressure) signed up to South Stream.

The southern corridor



Source: *The Washington Institute for Near East Policy*

Furthermore, the EU is on course to make its internal energy market more resilient in case of supply disruptions. New EU legislation requires European governments to ensure the construction of more ‘interconnectors’ between national pipeline systems, draw up emergency plans for gas supply interruptions and add further gas storage tanks. The EU has also started another push to make member-states open up their national energy markets to more competition. The objective is to create an integrated and flexible European gas market in which energy shortages in one country can be met quickly through supplies from elsewhere in the EU. Russia, which prefers long-term bilateral contracts, stable prices and captive markets, has objected to the EU’s liberalisation efforts.

The energy relationship between Russia and the EU is therefore subject to growing tensions and uncertainties, and Russia’s plan to turn eastward for security of demand is understandable. At first glance, Russia’s strategy fits neatly with China’s desire for security of supply.

China’s hunger for energy

China is an energy-starved nation. “China is growing like America was growing in the last century”, explains one Chinese energy expert, “but without the indigenous [oil and gas] reserves.” China’s main source of energy is coal, of which it has plenty. Around 20 per cent of its energy comes from oil, and that share is set to continue to rise as more Chinese buy cars. Between 1997 and 2007, China’s booming demand for oil accounted for approximately one-third of world oil demand growth, and China is now the world’s second largest oil consumer behind the US. In 2010, China’s oil demand reached 9 million b/d, of which it covered less than half from its own production. This gap is set to grow further: the IEA forecasts that China will have to import over 70 per cent of its oil in 20 years time.⁸

⁸ *International Energy Agency, ‘World energy outlook 2010’, November 2010.*

China’s demand for gas is growing at an equally fast pace, albeit from a much lower base. In 2008, China consumed 85 bcm, according to the IEA. It produced most of this at home and imported only a small share through LNG. Gas at present accounts for only around 3 per cent of China’s total primary energy mix, but Beijing aims to increase the use of gas to 250 bcm in 2015, which would be roughly 8 per cent of its energy mix. This would require China to import over 100 bcm that year. Since China is concerned about the safety of sea lanes, it will want to import a good portion through pipelines rather than in the shape of LNG shipments.

A faster expansion of gas use in China would be very much in the West’s interest since a switch from coal to less polluting gas would have a substantial beneficial impact on the world’s climate. However, barring an indigenous shale gas boom, China will have to increasingly rely on imports for its gas consumption.

Many energy experts think that China has significant potential for the development of shale gas. The US Energy Information Agency (EIA), for example, estimates that China’s reserves of

unconventional gas are 12 times larger than its conventional ones, and perhaps even larger than the US's own unconventional gas reserves. For a country obsessed with energy security, local gas resources must look hugely attractive. However, their development will require technology, market development, infrastructure and regulatory structures that will take time to develop. It also remains to be seen how the relatively high price of exploiting unconventional gas compares with gas imports, in particular if the import infrastructure is already in place (as is the case with the Central Asia-China gas pipeline). Therefore, while shale gas could have a long-term impact on China's plans to buy gas from abroad, it is too early to tell how that impact will unfold.

Today, China's energy security concerns are focused mostly on oil. In particular, it is keen to diversify its supplies away from the Persian Gulf, which currently accounts for over half of its oil imports. Not only is this region notoriously plagued by conflict, but also China's heavy reliance on Gulf oil means that 85 per cent of its crude imports arrive by tanker that must navigate risky sea lanes.

Given China's objective to rely less on Gulf oil and to buy more gas, it would make sense for it to form a long-term strategic energy partnership with Russia. Russia, as explained, faces heightened uncertainty in its traditional European markets. In addition, the shift of oil and gas production to fields in eastern Siberia, the far east and north make China look like a natural customer. To understand why this potentially mutually beneficial energy relationship is not developing, one has to take a step back and look at the wider Russia-China relationship.

Sino-Russian relations in the 21st century

Sino-Russian relations have improved considerably over the last two decades. This rapprochement has been driven less by a joint strategic vision or common values than by shared interests, commercial as well

as political.⁹ Both Moscow and Beijing dislike US supremacy, fear instability and extremism in their common neighbourhood and oppose Western interference in the affairs of sovereign countries. In 2004 the two countries resolved a long-standing dispute regarding their 4,300-kilometre border, thus removing the most contentious issue from their bilateral agenda. Trade between Russia and China has increased significantly since the turn of the century, reaching \$59 billion at its peak in 2008, before declining to \$39 billion in 2009 as a result of the economic crisis. Russia and China also co-operate through the Shanghai Co-operation Organisation (SCO), the other members of which are Kazakhstan, Tajikistan, Uzbekistan and Kyrgyzstan. Although China is keener to develop the SCO than Russia, the organisation has allowed reinforced co-operation in counter-terrorism, economics and trade, as well as joint military exercises and intelligence sharing. Remarkably, the one aspect of the Sino-Russian relationship that has developed slowly is energy.

Impediments to an energy partnership

Although Russian oil sales to China have expanded rapidly from their negligible levels in the mid-1990s, they remain rather limited. In 2010, Russia was China's fifth most important crude oil supplier, after Saudi Arabia, Angola, Iran and Oman, and barely ahead of Sudan and Iraq, according to the EIA. China has bought some Russian LNG on the open market, but there is as yet no gas relationship to speak of.

In essence, while there is much incentive for Russia and China to forge a strategic energy partnership, there is equal – if not greater – force keeping them apart. A number of powerful factors will ensure that for the foreseeable future Russia will continue to look west for its main energy markets while China will be wary of relying on Russia for its burgeoning energy needs.¹⁰

⁹ Bobo Lo, 'Ten things everyone should know about the Sino-Russian relationship', CER policy brief, December 2008.

¹⁰ Igor Danchenko, Erica Downs and Fiona Hill, 'One step forward, two steps back? The realities of a rising China and implications for Russia's energy ambitions', Foreign Policy at Brookings, policy paper No.22, August 2010.

★ Strategic imbalance

Despite common interests, an undercurrent of distrust runs through the Sino-Russian relationship. Russia is acutely aware of China's growing economic and strategic superiority and it fears being marginalised in a world dominated by rivalry between the two global superpowers, the US and China. China, meanwhile, regards Russia not as an equal partner but a middling power sometimes prone to rash action designed to stem its own relative decline.

Russia and China compared		
	Russia	China
Population, million	142	1,323
Territory, thousand square km	17,075	9,561
GDP, \$ billion	1,479	5,878
Per cent of world GDP*	3	14
GDP per head, \$	10,441	4,479
Exports, \$ billion	400	1,591
International reserves, \$ billion	479	2,876
GDP growth forecast, 2011-15, per cent on average	4.4	8.5

Data are for 2010, unless otherwise indicated

**At purchasing power parity*

Source: The Economist Intelligence Unit

This overall strategic imbalance is also visible in the energy field. Moscow fears that by supplying raw materials to China it could become an 'accessory' of the country's ascent. Wedded to zero-sum thinking, many Russian policy-makers and experts fear that China's economic growth and geopolitical strength might come at Russia's expense. They also worry about the narrow, one-sided nature of their energy relationship with their more populous neighbour.

China, of course, pays for the raw materials it imports from Russia. But it does little to assist Russia's economic modernisation – which has become the overarching official objective of Russian policy. To upgrade and diversify its economy, Russia relies on investment, know-how and technology from the US and the big EU countries, rather than China. The EU-Russia 'partnership for modernisation', launched at a bilateral summit in mid-2010, is proof of the EU's commitment to extending benefits beyond the straightforward exchange of capital for raw materials. The Obama administration is looking to strengthen trade and investment links, to take the 'reset' in bilateral relations beyond initial agreements on arms control, Iran and Afghanistan.

Some Russian policy-makers and officials think that by acting as China's 'raw material appendage', Russia may inadvertently help China to build up its own military-industrial complex and thus accelerate that country's rise to economic and military superiority. They fear a further reduction in Russian arms sales to China (one of the few Russian industries aside from energy that benefits from China's booming demand); increased competition in global markets for military hardware; and finally the risk of China posing a strategic threat to Russia in the east. In addition to military and economic competition, some Russians are also concerned that China could gain influence over Russia's vast far eastern territories that are rich in resources but increasingly devoid of people. The concern is that Chinese immigration, trade and investment could translate into political influence in these regions.

★ Lack of cross-border pipelines

It is remarkable that although the world's largest hydrocarbon producer and one of the world's most sizeable and fast-growing energy markets share several thousand kilometres of common border, there was until recently not a single big cross-border pipeline linking the two countries. The lack of cross-border energy infrastructure is both a reflection of the deeper economic, political

and strategic caution that underlies the Russia-China relationship and an impediment to the rapid development of closer energy ties.

The bulk of Russian oil that goes to China is transported by railway cars – an expensive, if flexible, way to ship crude oil. Discussions between Moscow and Beijing on possible cross-border oil pipelines continued for over a decade. Early proposals focused on constructing a pipeline from Angarsk in eastern Siberia to Daqing in north eastern China. These plans were shelved for a variety of reasons, not least because the project was driven by the private oil company Yukos. The company's boss, Mikhail Khodorkovsky, subsequently fell out of favour with the Kremlin. He had supported the political opposition and promoted private oil pipelines that threatened to undermine the monopoly of the state-owned pipeline operator Transneft. Khodorkovsky was convicted (and re-convicted) on fraud charges, while Yukos's assets largely ended up in the hands of the state-controlled oil company Rosneft.



Source: Reuters

In 2003, Yukos's pipeline plans were merged with those for a rival project supported by Transneft. The outcome was the multi-stage East Siberia-Pacific Pipeline (ESPO) designed to transport Siberian crude via Russia's far east to the Pacific coast, where it will be loaded onto tankers destined for Asian markets. A spur from this pipeline into China was part of the original design but it took until 2009 for a final deal on this to be signed.

This deal came against the background of Russia struggling to emerge from recession and regain access to global capital markets, and it involved a trade of Chinese capital for Russian oil: the state-controlled China Development Bank lent Transneft and Rosneft \$25 billion in return for 300 million tons of oil to be supplied between 2011 and 2030.¹¹ A portion of the money was used to construct the spur from Skovorodino to the Amur River on the Russia-China border which was opened at the start of 2011. Through this spur Russia will ship the 300 million tons of oil to China, at a rate of 15 million tons per year, or 300,000 b/d, on average until 2030.

¹¹ Robin Paxton and Vladimir Soldatkin, 'China lends Russia \$25 billion to get 20 years of oil', Reuters, February 17th 2009.

The agreement is unusual in that oil supplies are rarely committed to one buyer, and are usually sold on the global market. It is also unusual that the government of (or a government-controlled entity from) the importing country provides the entire financing of the transport infrastructure for an energy deal. It is more common that energy companies from the exporting and importing countries seek funding for infrastructure projects jointly. Moreover, Russia usually likes to keep (or gain) control of the pipelines used to export its hydrocarbons.

The ESPO oil pipeline has not, to date, been supplemented by a gas pipeline. An Irkutsk-to-China gas pipeline was proposed as far back as the 1970s. But as of 2011, the most noteworthy development has been a plan promoted heavily by TNK-BP, the British-Russian joint venture, to construct a pipeline from the

large Kovykta gas fields in eastern Siberia to China and South Korea. The project appeared to make some progress in 2003 but has since stalled. TNK-BP used to hold the license to develop the Kovykta gas fields. However, it did not have the right to export gas from Russia since Gazprom has long had a de facto – and since 2006 also a legal – monopoly on gas exports. Although Gazprom had previously been unwilling to join the venture, it purchased the rights to the Kovykta fields from TNK-BP in March 2011 for \$770 million. This deal might imply that Gazprom itself wants to develop these fields for the Chinese market but so far there are no concrete plans.

★ Economic disagreements

Disagreements about the prices at which Russia sells oil and gas to China, as well as the terms of individual energy infrastructure projects, have led to further delays in strengthening the China-Russia energy relationship.

Generally, when global oil prices were low, for example in the early 1990s, Russia was keen to tie China down as a long-term partner by

¹² Erica Downs, *Sino-Russian energy relations – An uncertain courtship*, in James Bellacqua (editor), *The future of China-Russia relations*, University Press, 2010.

building bilateral infrastructure. When oil prices rose, as was the case for much of the last decade, China typically pushed for progress on oil pipelines and bilateral deals while Russia, with a new sense of power in the relationship, resisted. A middle ground has been hard to find in this ebb and flow of economic interests.¹²

Another, and related, source of disagreement has been the pricing formula used in bilateral energy deals. In the oil trade, China has been reluctant to pay the ‘global’ market price while in gas deals it has rejected the oil-price linked formulas used in Russia’s long-term contracts with European customers. Instead, China has in the past offered a gas price that is linked to that of coal, which is much lower than the prices Europeans tend to pay. The Russians insist,

however, that they are “not prepared to accept special pricing requests that are not in our interest”, in the words of one Russian energy official.

Disagreements over prices and commercial terms have proved a considerable stumbling block, both for bilateral energy trade contracts and for the commissioning and construction of bilateral energy infrastructure projects. In June 2011, five-year negotiations over a 30 bcm supply deal (possibly rising to 68 bcm once signed) between Russia and China faltered once again because the two sides’ expectations on delivery prices remained too far apart.¹³

¹³ Ben Blanchard, *Russia and China fail to reach 30-year gas supply deal*, Reuters, June 17th 2011.

★ Russian rent-seeking

Any oil and gas deal in Russia has to factor in strong vested interests or ‘rent-sharing’ arrangements. The negotiations leading to the ESPO spur to China are a good example. The state-owned Russian Railways (RZD) has opposed the construction of the pipeline for which first TNK-BP and Yukos, and then Transneft, had lobbied hard. RZD generates substantial revenue from shipping 20-25 million tons of oil per year to the Russian far east and China. Transneft and Rosneft, however, stand to gain from a pipeline link to ship oil to the east. The end result was a typical Russian rent-sharing compromise which saw construction delayed so as to allow RZD to make money from railway shipments until 2011-12.¹⁴

¹⁴ Igor Danchenko, Erica Downs and Fiona Hill, *One step forward, two steps back? The realities of a rising China and implications for Russia’s energy ambitions*, Foreign Policy at Brookings, policy paper No.22, August 2010.

With competing interests to satisfy domestically, Russia has found it difficult to commit to long-term bilateral initiatives with China. Widespread corruption and patronage within the Russian economy and political system will make this cycle hard to break for the foreseeable future.

An unfulfilled relationship

The Sino-Russian energy relationship has failed to fulfil its potential, due to a host of strategic concerns mainly from Russia's side, economic disagreements between Russia and China, and competing interests within Russia. The critical lack of cross-border infrastructure reflects these factors and is itself an impediment to a rapid strengthening of this relationship. Consequently, while Russia will continue to sell oil and gas to China, these sales are unlikely to be sizeable and stable enough to form the basis for a strategic energy partnership. The real dynamics of the China-Russia energy relationship are meanwhile being played out in their competition for influence and resources in Central Asia.

3 Central Asia as a rising energy region

Oil and gas has been produced around the Caspian for a century. But it was only after the collapse of the Soviet Union that the region's considerable resources attracted growing international attention. Kazakhstan and Azerbaijan quickly opened up their oil fields to foreign investment, and their crude found its way onto international markets. The development of the region's gas sectors took longer since Russia's pipeline transport monopoly allowed the country to maintain a firm grip on the region's gas exports. It was only when the prospects of alternative export routes became realistic, in the first decade of the new century, that international private oil companies, as well as state-owned ones, started committing serious money to the development of gas fields in Turkmenistan and elsewhere in the region.



All Caspian states have now to some extent diversified their customer base: Russia – traditionally the sole buyer of the region’s hydrocarbons – is of decreasing importance; Caspian crude oil is sold onto western markets and also increasingly shipped to China; China is also on course to become a major customer for Caspian gas; the European Union could be an important market, if and when a transport link in the form of a southern corridor has been established; and some regional producers are also eyeing the fast-growing markets to the south, notably India and Pakistan.

¹⁵ This section draws on chapter 17 (*‘The Caspian: Hydrocarbon resources and supply potential’*) of the IEA’s *‘World energy outlook 2010’*, November 2010.

¹⁶ ‘Proven reserves’ are volumes of oil and gas that have been discovered and can be extracted profitably assuming current technology, marketability and assumptions about future prices.

¹⁷ ‘Ultimately recoverable reserves’ refers to the latest estimates of the total volumes of oil and gas that can be produced commercially, including proven reserves and as yet undiscovered (but assumed) resources. ‘Remaining recoverable reserves’ are ultimately recoverable resources less cumulative production to date.

relatively unexplored, these estimates could be revised upwards significantly in the future.

The IEA predicts that Caspian oil production will rise from 2.9 million b/d in 2009 to a peak of 5.4 million b/d in the later half of the 2020s. Most of that oil will be exported to international markets so the Caspian’s share of global oil exports will rise to 9 per cent – approximately the same as Latin America’s. The projected expansion of natural gas output is equally impressive, with production forecast

The International Energy Agency¹⁵ estimates that the Caspian region (including Azerbaijan) contains 3.5 per cent of the world’s proven oil reserves¹⁶, while remaining recoverable reserves¹⁷ are closer to 5 per cent. The bulk of these reserves are in Kazakhstan, with smaller volumes in Azerbaijan and Turkmenistan. The region’s share of global proven (and recoverable) natural gas reserves is around 7 per cent, mostly concentrated in Turkmenistan.

Since the Caspian region is as yet

to almost double from around 160 bcm in 2009 (a year when production was artificially depressed) to 315 bcm by 2035. Around 130 bcm of this gas will be available for export, which will give the Caspian an 11 per cent share in global gas sales.

Caspian oil and gas reserves and production

	Oil reserves, billion barrels	Oil production, million barrels a day	Gas reserves, trillion cubic metres	Gas production, billion cubic metres a year
Azerbaijan	18.2	1.1	4.1	17
Kazakhstan	68.9	1.6	5.8	36
Turkmenistan	15.9	0.2	11.9	41
Uzbekistan	4.3	0.1	3.7	66
Other Caspian*	1.3	0.0	0.3	0.1
Total	108.6	2.9	25.8	159
Share of world total %	4.7	3.5	6.9	5.1

Reserves are remaining recoverable reserves as defined in footnote 17; output figures are from 2009

**Armenia, Georgia, Kyrgyz Republic and Tajikistan*

Source: IEA

Most future growth in hydrocarbon exports is assumed to come from a small number of enormous (experts talk of ‘super-giant’) fields: oil from Tengiz, Karachaganak and Kashagan in Kazakhstan and from the Azeri-Chirag-Guneshli (ACG) group of fields in Azerbaijan; and gas from Shah Deniz in Azerbaijan and South Yolotan-Osman in Turkmenistan. On current projections, Kazakhstan could become one of the world’s leading oil exporters in coming decades, while Turkmenistan could assume a similar place for natural gas.

However, there are also a number of obstacles that could stunt Central Asia's rise as an energy region of global importance. First, the investment climate in the individual Caspian states may not be conducive to attracting the large-scale investments needed to develop their hydrocarbon resources. It would be wrong to generalise about the policy, legal and tax conditions in the various producer countries. But what they have in common are highly centralised political systems combined with weak legal systems and institutions, which means that any change at the top can quickly translate into policy reversals. International investors in Azerbaijan and Kazakhstan have come under pressure to re-negotiate the conditions of their contracts when governments sought to get a better deal for their treasuries or their own state-owned energy champions. Turkmenistan has so far allowed only limited involvement of foreign oil companies in its gas sector (more below).

Some Caspian countries have made tentative moves towards improving the investment climate in their hydrocarbon sectors. For example, in December 2010, Kazakhstan was declared to be "close to compliance" with the standards of the Extractive Industries Transparency Initiative (EITI), a club that encourages the disclosure of deals in, and revenues from, resource production. The EITI also prods resource-producing states to ensure that society at large benefits from the profits generated. Azerbaijan has been a member of the EITI since 2009. But Turkmenistan, with its obscure state policies and budget, and lack of an independent civil society, is still a long way from compliance.

Doing business in hydrocarbon producing states, the Caspian compared			
	Perception of corruption, ranking out of 178 countries*	Business environment, ranking out of 82 countries **	Political freedom & civil liberties, score from 1 (free) to 7 (least free) ***
Azerbaijan	134	74	5.5
Kazakhstan	105	70	5.5
Turkmenistan	172	n/a	7.0
Russia	154	61	5.5
China	78	49	6.5
Qatar	19	22	5.5
Nigeria	134	76	4.0
Canada	6	4	1.0
Brazil	69	38	2.0

**Transparency International corruption perception index 2010*

***The Economist Intelligence Unit ranking of business environments over 2005-10*

****Freedom House 2011 combined score for political freedom and civil liberties*

Second, the central location that makes Caspian resources so interesting to a variety of customers – from Europe, Russia and Asia – also impedes their export. Turkmenistan, Azerbaijan and Kazakhstan are landlocked in the sense that the Caspian Sea does not provide an outlet to the high seas that would make tanker transport possible. Pipeline transport of oil and gas is cost-effective for distances of up to several thousand kilometres. But with the exception of Kazakh sales to Russia and China, export routes for oil and gas from the Caspian region require complex pipeline projects that cross several borders.

Since there is no regional or international legal regime for energy

¹⁸ *All Caspian nations have ratified the International Energy Charter Treaty. However, the parties to the treaty have not succeeded in agreeing on a 'transit protocol', a document that could provide a firm legal basis for international oil and gas shipments.*

transit, such international pipeline shipments are often subject to prolonged wrangling to satisfy the demands of all those involved.¹⁸ In the Caspian region such deals can be further complicated by the fact that the (potential) transit states are themselves energy producers and may therefore have limited incentives to facilitate the access of rival producers to international markets.

The region's many conflicts and trouble spots further complicate pipeline development. This is true for both long-standing

¹⁹ *Armenia's borders with both Azerbaijan and Turkey have remained closed since the armed conflict surrounding the enclave in the early 1990s. This, together with continuous security concerns, makes Armenia wholly unsuitable for transit.*

problems, such as the Nagorno-Karabakh dispute that precludes any energy transport via Armenia¹⁹, and more acute ones, such as the volatility that remains in Georgia after the Russia-Georgia war in 2008. In short, whereas Gulf oil and LNG are placed on the open market almost immediately after extraction, Caspian oil and gas transportation can entail a host of political obstacles.

²⁰ *Edward Chow and Leigh Hendrix, 'Central Asia's pipelines: Field of dreams and reality', National Bureau of Asian Research, NBR special report no 23, September 2010.*

One should not overestimate the importance of politics in the development of Central Asia's resources: political agreement is only one "instrumental but not decisive" condition for complex pipeline projects to be realised.²⁰ A number of other criteria must also be fulfilled: there must be major dedicated

volumes of oil and gas for the pipeline; a large-enough company must be committed to leading the project; and the investor(s) must assess that the pipeline is economically viable and superior to alternative transport routes. While not in any way denying the importance of such economic and commercial factors, this report focuses on the policy and political issues surrounding Central

Asian energy, especially the role of China and Russia, as well as the EU and the US.

Russia – the legacy player

Russia has long considered Central Asia to be its own 'backyard' – an area in which it has traditionally enjoyed considerable political leverage and economic influence. After the dissolution of the Soviet Union, Russia has sought to maintain its influence through direct economic and bilateral contacts, and also through building regional organisations which include: the Commonwealth of Independent States (CIS), set up in 1991 but of marginal importance today; the Eurasian Economic Community which was established in 2000 but had little practical relevance and has more recently been superseded by more concrete plans to build a customs union (and eventually an economic space) between Russia, Belarus and Kazakhstan; and the Collective Security Treaty Organisation (CSTO), a regional military alliance signed in 2002; the CSTO includes Russia and five former Soviet states and is widely seen as Russia's attempt to counter the growing influence of the (in Russian eyes) China-dominated SCO.

The Central Asian countries have responded to these initiatives with varying degrees of enthusiasm. They have sought to capitalise on their traditional links with Russia while balancing Russian influence through building relations with other countries wherever possible.

Energy has been an integral part of Russia's efforts to maintain its predominance in the region. After 1991, the former Soviet Central Asian republics started to open up to global markets to varying degrees. However, the legacy of being part of the Soviet Union meant that the new countries' energy sectors were tightly integrated with Russian production and pipeline networks. Initially, the only outlet for energy from the Caspian region was via Russian territory and through state-controlled Russian pipelines. Russia does not allow non-Russian companies to use its pipelines for transit: every molecule of oil and gas that enters Russian territory becomes Russian.

Russia was thus able to exploit the de facto monopoly it enjoyed over energy transit on the Eurasian landmass. Since oil and gas are the biggest sources of income for the Caspian producer countries, control over their energy sales also gave Russia considerable political influence over its southern neighbours and thus served strategic goals.

In the oil trade, Russia's monopoly was quickly broken. Azerbaijan and Kazakhstan opened their hydrocarbon resources to western oil companies after independence in 1991. BP took the lead in the development of the Azeri-Chirag-Guneshli oil and associated gas fields in Azerbaijan, while Chevron and ExxonMobil joined the development of the vast Tengiz and Korolev oil fields in Kazakhstan.

To transport this oil to international markets, western companies initially assessed the option of accessing the existing Soviet-era pipeline system operated by Russia's Transneft. However, the negotiations proved controversial, not least because of concerns about Russia controlling the export routes for Caspian oil.

BP then led the development of the region's biggest new oil pipeline to date, the 1.2 million b/d Baku-Tbilisi-Ceyhan pipeline (BTC) from Azerbaijan via Georgia to the Turkish coast. (A small volume of Azerbaijani crude is exported via the Baku-Novorossiysk system, with Transneft operating the Russian section.)

The region's second biggest pipeline – which may eventually exceed BTC in capacity – is the Caspian Pipeline Company's pipeline from Atyrau in Kazakhstan to Novorossiysk in Russia. Western companies in Kazakhstan, notably Chevron, initially envisaged that the pipeline would be built and operated to international standards, and that it would not involve Transneft as an operator. They only partially succeeded in securing these aims. Transneft does currently manage the Russian share of the project, although the pipeline as a whole is not subject to the monopolistic pricing practices that characterise the rest of Transneft's Russian network.

In short, Russia has lost much of its former dominance in the regional oil trade. In Kazakhstan today, Russian companies, most notably Lukoil, are investing alongside western oil companies, as well Kazakh national champions, in the development of hydrocarbons.

Russia's monopoly in the gas trade lasted considerably longer. By buying up Central Asian gas and shipping it through its own pipelines, Russia prevented the countries in the region from gaining access to lucrative western markets independently. Gazprom used to generate significant profits from buying Turkmen gas cheaply to supply Ukraine while selling its own gas at three times the price to its European customers. Until 2006, cheap Turkmen gas allowed Russia to maintain steeply discounted prices for former Soviet neighbours such as Belarus and Ukraine. The mainly barter-based gas trade between Turkmenistan, Russia and Ukraine was conducted through a number of non-transparent but hugely profitable intermediaries.

In 2005, Russia announced that it would move to 'European market prices' in its gas sales to CIS countries and it started raising prices for countries such as Ukraine shortly after. However, it was only in 2008, when the prospect of alternative customers for Central Asian gas became realistic, that Russia offered to pay more for the gas it bought from there. The previous year, Russia had signed a new agreement with Turkmenistan and Kazakhstan to upgrade and expand the main Soviet-era pipeline for transporting gas into Russia – another indication that Russia was serious about locking up Caspian gas resources for the future.

Russia signed these deals at a time when it did not actually have much demand for Central Asian gas – and thus showed its willingness to sacrifice short-term profits for long-term strategic goals.²¹ With gas demand falling in Europe in the wake of the 2008-09 economic and financial crisis, Russia no longer needed Central Asian gas to make up domestic

²¹ Danila Bochkarev, "European" gas prices: Implications of Gazprom's strategic engagement with Central Asia', *Pipeline & Gas Journal*, June 2009.

shortfalls or fulfil its contracts with Ukraine. Indeed, shortly after it signed a batch of new long-term agreements with Caspian producers, promising to buy big volumes at twice the price it had hitherto paid, Russia effectively stopped buying Central Asian gas altogether (see section on Turkmenistan below). Although gas flows have been restored, current sales are running much below contracted volumes.

The IEA predicts that Russia may not need significant volumes of Central Asian gas in the near future, provided the country becomes more serious about energy savings at home and the outlook for European gas demand remains subdued. However, these IEA forecasts were made before Germany's decision to phase out nuclear power, which may yet lead to a revival in European gas demand.

Russia's main objective, for the time being, is to prevent Caspian producers from concluding contracts with western customers, in

²² Edward Chow and Leigh Hendrix, 'Central Asia's pipelines: Field of dreams and reality', *National Bureau of Asian Research, NBR special report no 23, September 2010.*

particular in Europe, which Russia considers its 'captive market': "The Russian attitude seems to be, if Central Asian gas is to be exported by a route other than Russia, it is better for the gas to go east than west, where it would compete against Russian gas in its primary European market."²²

The fact that Stroytransgaz, a Gazprom subsidiary, built the Turkmen stretch of the Central Asia-China gas pipeline, which now runs from Turkmenistan through Uzbekistan and Kazakhstan to China, adds credibility to this view. So does the announcement by Igor Sechin, the Russian deputy prime minister who is also in charge of energy concerns, in October 2010, that Russia would play an instrumental part in the construction of a pipeline from Turkmenistan via Afghanistan and Pakistan into India (a claim that the Turkmen government then vehemently denied).

Meanwhile, Russia has gone to great lengths to stop the development of a gas relationship between Caspian producers and

European customers. Russia has tried to foil European plans to construct a southern corridor of pipelines to ship gas from the Caspian region directly to the EU. The southern corridor includes potential pipelines such as the Interconnector Turkey-Greece-Italy (ITGI), the Trans-Adriatic Pipeline (TAP) and Nabucco. In particular, plans for Nabucco, designed to run via Turkey and the Balkans to the Austrian gas hub of Baumgarten, have worried Russia. To prevent Nabucco from being built, Russia has been pushing for the rival South Stream pipeline that would run under the Black Sea to Bulgaria, Italy and Austria. South Stream would have a capacity and a price tag roughly twice as high as Nabucco, and many experts doubt its commercial viability. The motivation behind the project appears to be to stymie the southern corridor and satisfy Central and East European gas demand (which might otherwise be met by pipelines such as Nabucco). This impression was reinforced in 2009-10 when Russia used pending re-negotiations on gas sales and transport with its Central and East European customers to make them support South Stream (at least on paper).

Moreover, Russia has sought to prevent the companies behind Nabucco and other potential southern corridor pipelines gaining access to the required gas resources. In 2010, Russia offered to buy the entire gas output of Azerbaijan – the most likely source of early gas for the southern corridor.²³ Russia also quickly restored its gas relationship with Turkmenistan, another potential source of Nabucco gas, after it had been suspended in 2009 (see below). Russia promised to buy up to 30 bcm of Turkmen gas annually – far in excess of what it can absorb in the current market environment. Finally, Russia has sought to prevent the construction of a trans-Caspian gas link, which would allow Turkmen gas to flow into the southern corridor (see box page 56).

²³ RIA Novosti, 'Russia's Gazprom ready to buy all Azerbaijan's gas', *June 19th 2010.*

Despite these efforts, Russia's legacy position in Central Asia has weakened over time as other players have increased their influence and interests in this energy rich region. Today, Central

Asia is a fulcrum for strategic, political and economic interests, not only for Russia but also for China, South Asia, Europe and the US.

The US – strategic interests

The US does not need Caspian gas – especially now that it has become self-sufficient following its shale gas revolution. It sees Caspian oil as a valuable addition to a global market where major supplier regions, such as the Middle East, are plagued by chronic instability and where the OPEC consortium still wields enough power to push up energy prices. But the US's main interests in Central Asia are political and strategic. Since the end of the Cold War, Washington's over-arching objective has been to help the newly independent states to develop their economies, consolidate their independence and maintain political stability. Unlike the EU (at least until recently), the US quickly realised the strategic importance of Caspian hydrocarbons not only for international energy markets but also for the stability, independence and economic development of the producing and transit countries.

Richard Morningstar, the Obama administration's special envoy for Eurasian energy, has been intimately involved in the US's political and energy strategy towards Central Asia for decades. He has summed up his country's interests as follows: "The US has wanted to make sure that [Caspian] resources be available for development by American companies as well as business interests from friendly countries; that Turkey, because of its own historical roots, become more involved in the region to help ensure the independence of these new countries; and that multiple routes of access be developed

²⁴ Richard Morningstar, 'The Baku-Tbilisi-Ceyhan pipeline: A retrospective and a look at the future', *Central Asia-Caucasus Institute Analyst*, August 23rd 2006.

for resources to be exported from the region. The US position was and still is that Russia should not have a monopoly on pipelines, and that no pipelines should go through Iran thereby subjecting these new resources to the whims of a dangerous government."²⁴

American oil companies became involved in the exploration and extraction of Caspian hydrocarbons in the 1990s, most notably Chevron and ExxonMobil, along with Amoco, which was bought by BP, and Unocal, which is now part of Chevron. Yet US efforts to support and facilitate the construction of new pipelines from the Caspian to western markets have been motivated not only by a desire to provide outlets for the oil (and gas) produced by American companies. The US, much earlier than Europe, realised that the Central Asian states cannot gain true independence as long as they are fully reliant on the Russian pipeline network. The Clinton administration actively supported the Baku-Tbilisi-Ceyhan (BTC) pipeline to bring Azerbaijani (and possibly Kazakh) oil via Georgia to the Turkish Mediterranean coast. A smaller gas line, the South Caucasus pipeline, was constructed alongside the BTC pipeline. The US has also supported the construction of a trans-Caspian pipeline and of Nabucco.

In more recent years, and since September 11th in particular, US attention in Central Asia has shifted towards the struggle against Islamic extremism and terrorism. Extremist groups have been active in the region for years, in particular in the Fergana valley that straddles Uzbekistan, Kyrgyzstan and Tajikistan. The US has provided sizeable assistance to help the Central Asian countries to build up their law enforcement, intelligence and counter-terrorism capabilities, although those assistance budgets have shrunk in recent years.

Moreover, since Turkmenistan, Uzbekistan and Tajikistan border on Afghanistan, Washington has had a particular interest in these countries being both stable and willing to support US and NATO objectives. At various points they have acted as conduits for supplies into the war-zone, as well as airbases for coalition forces. Currently, the Manas air base in Kyrgyzstan acts as a major base for the NATO mission. Previously, the Karshi-Khanabad airbase in Uzbekistan had similar operational value for the US. Uzbekistan, however, expelled US forces following the signing of a Shanghai Co-operation Organisation declaration in 2005 that implicitly called for the US to

withdraw its forces from SCO member-states. Although some Central Asian governments continue to regard the US's military presence in the region with suspicion, they also fear that the planned phased withdrawal of US and NATO troops from Afghanistan and Central Asia will leave them to deal with heightened instability.

Although Russia initially acquiesced in the stationing of US troops in Central Asia after September 11th, some US policy-makers have seen their country as being engaged in a tug-of-war with Russia over influence in Central Asia and the former Soviet Union more generally. The Central Asian states have welcomed US involvement as a means of reducing the overbearing influence of Russia in the region and because it appears to bestow international legitimacy on their regimes. On the other hand, some of the region's rulers have joined Russia in suspecting that the US has provided covert assistance to political opposition forces and thus sought to foster 'colour

²⁵ *Central Asia Study Group*, 'Strengthening fragile partnerships: An agenda for the future of US-Central Asia relations', *Project 2049 Institute*, February 2011.

revolutions' of the kind that swept through Ukraine, Georgia and Kyrgyzstan in 2003-05. More recently, Central Asian countries have suspected the US of subordinating its relations with Central Asia to the objective of 'resetting' its relationship with Moscow.²⁵

As for China, US policy-makers have interpreted Beijing's advances into Central Asia, including through the mechanism of the SCO, as having a double strategic purpose: gaining access to energy resources while also countering Western and Russian influence. Many US policy-makers and analysts have welcomed China's involvement in the region because it counter-balances Russian hegemony and helps the development of Central Asian energy sectors and economies. Chinese investment helps to bring on-stream new volumes of oil and gas. In the case of oil, these help to ease a tight global market; in the case of gas, they add a relatively clean fuel to China's energy mix, which helps combat climate change. China's energy investments in Central Asia also give this rising superpower a stake in the stability of the region, which is important in particular in view of the

expected withdrawal of US and NATO troops from Afghanistan and surrounding countries. However, many policy-makers and analysts in the US also worry that China's influence could become dominant and that its political and financial support for incumbent regimes could make democratic reforms and economic liberalisation even harder to achieve.

The EU – the latecomer

The European Union has yet to establish a track record in pursuing its interests in Central Asia. Beyond the EU's declared objectives of fostering stability, economic development and the rule of law in the region, the EU also has clear interests, notably to gain access to Caspian energy resources as part of its strategy to diversify sources of supply, and to gain Central Asia's support for European countries' engagement in Afghanistan.

Individual EU countries, most notably Germany and France, have had well-developed links to Central Asian countries going back to the 1990s. Germany is the only EU country that has diplomatic representation in all Central Asian states and it is the biggest trading partner among the EU countries for most of them. Although the EU has run assistance projects and reform initiatives in Central Asian countries since the 1990s, it was only under the German EU presidency in 2007 that the EU adopted its first comprehensive Central Asia strategy.²⁶

²⁶ *European Council*, 'The EU and Central Asia: Strategy for a new partnership', June 2007.

The strategy aims at strengthening bilateral links between the EU and the Central Asian countries as well as fostering regional co-operation on issues such as security and water management. Among the strategy's many priorities are improvements of human rights, democracy and the rule of law; strengthening energy and transport links; combating terrorism, extremism and trafficking; and supporting cultural dialogue and people-to-people contacts. The EU has made around €700 million available for the Central Asia

strategy under its 2007-13 budget – a sum that observers generally judge as too small to have an impact on the wide-ranging objectives that the EU has formulated. Experts have also criticised the EU's Central Asia policy for lacking focus; being insufficiently tailored to

²⁷ Michael Emerson, Jos Boonstra and others, 'Monitoring the EU's Central Asia strategy', report to the EUCam project by CEPS and FRIDE, 2010.

the needs of the five individual Central Asian states; putting too much emphasis on democracy and human rights rather than fostering mutually beneficial links; and for not sufficiently taking into account the role of other strategic players in the region, such as Russia and China.²⁷

Some European energy companies have been active in Central Asia and the Caspian for years. For example, Britain's BP has been a partner in the exploration and development of Azerbaijan's oil and gas reserves as well as the construction of important regional pipelines, such as the BTC oil pipeline and the South Caucasus gas pipeline. Royal Dutch Shell, Italy's ENI and France's Total are involved in Kazakhstan's Kashagan offshore oil field. More recently, Germany's RWE has started exploring gas fields off Turkmenistan's Caspian coastline.

Energy issues, however, have been slow to move up the official agenda of EU-Central Asia relations. In 1995, the EU initiated the INOGATE dialogue on regional energy transport with the countries of the Caucasus and the Black Sea and Caspian regions. In 2004 it added the 'Baku initiative', a regional platform to integrate energy markets and foster infrastructure developments. The EU has also established bilateral energy dialogues with Kazakhstan and Turkmenistan. These initiatives have had limited concrete results to date. The EU countries in 2008 authorised the European Investment Bank (EIB) to provide finance to energy and infrastructure projects in Central Asia, while the European Bank for Reconstruction and Development (EBRD) is also active in the region.

After the Russia-Ukraine gas crises of 2006 and 2009, the EU vowed to redouble its efforts to diversify its gas imports away from Russia

and the Ukrainian transit system. The southern corridor is at the heart of the EU's diversification strategy. However, although the EU has declared Nabucco and other possible southern corridor pipelines priority projects, they are still primarily driven by the private sector, with the EU's role restricted to providing political backing and some financial help. Since many Europeans themselves have expressed doubts about whether Nabucco is commercially viable, Turkmenistan and Azerbaijan have remained sceptical whether the EU is serious about Caspian gas.

The EU has stepped up its efforts to forge an energy relationship with Azerbaijan and Turkmenistan, with a number of high-profile visits of senior EU officials in 2010 and 2011, a mandate to help negotiate a trans-Caspian pipeline, and a commitment from the EIB and the EBRD to provide some of the financing needed for Nabucco. Nevertheless, the prospects for the southern corridor – and thus for EU-Central Asian energy relations – remain uncertain. The Azeri-led consortium that is developing the Shah Deniz II field (the only gas in the region that would be readily available to feed the southern corridor) has repeatedly postponed the decision on whether to sell the gas to Nabucco, ITGI or TAP – or whether it prefers another option altogether, such as shipping gas across the Black Sea in liquid or compressed form.

Nabucco, the largest and most ambitious of these projects, would require significant gas volumes beyond an initial contract from Shah Deniz II to be commercially viable. The Nabucco consortium is looking towards northern Iraq for possible supplies, as well as to Turkmenistan. Turkmen officials have in principle expressed an interest in selling gas to Europe. However, such supplies would require an energy transport link across the Caspian, a project that has been foiled by various disputes about delineation and resource allocation (see box page 56). Moreover, concerns about Georgia's stability as a transit country have remained acute since the Russia-Georgia war in 2008.

Competing European and Russian pipeline projects for a Eurasian gas corridor



Source: Taken from Stacy Closson, 'Energy security of the European Union', *CSS Analysis in Security Policy* no. 36 (June 2008), ETH Zurich

These delays in pipeline construction cannot simply be blamed on the weakness of the EU's energy policy. The same uncertainties surrounding global and European gas demand that have complicated EU-Russia energy relations in recent years have also made it harder to establish an energy link between the EU and the Caspian. Many experts still doubt whether it makes sense at all for the EU to spend the political and financial capital necessary to build a complex new energy relationship that would ultimately only supply a fraction of Europe's energy needs. Others, however, argue that if the EU is serious about building political and economic ties with the Caspian, energy has to be at the heart of such relationships. Moreover, the uprisings in Northern Africa and the Middle East in 2011 could lead to a re-evaluation of those regions as energy suppliers and once again re-directed the focus onto alternatives such as the Caspian.

Notwithstanding recent high-profile visits and a proliferation of joint projects, dialogues and declarations, the EU's Central Asia strategy is still in its infancy – as is its energy diplomacy. Looking at the overall picture in the region, Edward Chow and Leigh Hendrix sum up the EU's involvement as follows: "The one player missing from the field appears to be the EU, which is much better at making policy declarations than at taking policy action."²⁸

²⁸ Edward Chow and Leigh Hendrix, 'Central Asia's pipelines: Field of dreams and reality', *National Bureau of Asian Research, NBR special report no 23, September 2010.*

China – the new hegemon?

Throughout the 20th century, China has viewed Central Asia mainly through a paradigm of national security. After the dissolution of the Soviet Union and the independence of the Central Asian states, China's concerns both grew and diversified. China worries about the protection of its periphery and therefore hopes to build a Central Asian neighbourhood of friendly states. It fears that instability in Central Asia could result in terrorism and extremism extending across the border and feeding the separatist Uyghur movement in Xinjiang. By building up economic ties and fostering growth and stability in Central Asia, China hopes to turn its Xinjiang region from a poverty-stricken backwater into a prosperous regional trading hub, thus starving Uyghur separatists of new recruits.²⁹ Lastly, although China is concerned about US and NATO involvement in Central Asia, it is also worried about the instability that might ensue once Western troops leave Afghanistan and Central Asian bases.

²⁹ Kathrin Hamm and others, 'Turkmenistan natural gas outlook 2020: The Chinese connection', *Columbia School of International and Public Affairs workshop report, 2011.*

In the immediate post-Cold War period, China took a passive approach to Central Asia, staying on the sidelines of the Russia-American struggle for influence in the region. More recently, however, with economic and energy considerations rising to the fore and China becoming more self-confident in its foreign policy, this

has changed dramatically. Although China remains wary of becoming too entangled in a region replete with long-standing conflicts, it has become one of the key players in Central Asia. China's need for resources – which should, in theory, drive China to forge an energy partnership with Russia – has instead driven it to explore opportunities in the energy rich Caspian region. For Beijing, it appears easier to deal with the smaller Central Asian states, which are all keen on diversifying their customer base, than with Russia, whose energy policy vis-à-vis China is complicated by geo-strategic considerations. Moreover, China's preference for gaining direct access to resources is more easily accommodated in Central Asia than in Russia.

While western oil companies have been active in Kazakhstan and Azerbaijan since the early 1990s, more recently companies from the Gulf region and Asia, not only China but also Malaysia, Korea and India, have started investing there. China's involvement stands out as the most substantive among the non-western countries. In addition to government-to-government contacts, China mainly acts through the state-owned China National Petroleum Corporation (CNPC), which has made substantial investments across Central Asia and has also been the driver behind new pipeline developments.

In Kazakhstan, the CNPC-controlled company AktobeMunaiGaz is the third largest oil producer after the Kazakh national oil company KazMunaiGaz and the consortia that are developing Tengiz and Karachaganak. The fourth largest is MangistauMunaiGaz, in which CNPC bought a 50 per cent share in 2009, bringing the total share of Kazakh oil produced by Chinese government-controlled entities to 19 per cent.³⁰

³⁰ International Energy Agency, 'World energy outlook 2010', November 2010.

In 1997, China and Kazakhstan agreed to construct an oil pipeline from the Kazakh shores of the Caspian, across Kazakhstan and into Xinjiang. Construction of the first, westernmost, part was finalised in 2004, the section from central Kazakhstan into China opened in

2006, and the part to connect the two was finished in 2009. China, through CNPC, was instrumental in building and financing the pipeline. Although its capacity is set to double by the middle of the decade, at 400,000 b/d it would still be limited compared with planned pipeline expansions via Russia and the Black Sea. The long distances that Kazakh oil, especially from the big Caspian fields, has to travel to Chinese markets make Kazakh oil expensive for China. Nevertheless, since other pipeline developments in Kazakhstan are suffering from delays, exports to China might well rise faster than currently foreseen.

In 2007, China and Turkmenistan signed a production sharing agreement (PSA)³¹ for the Baktyyarylyk group of gas fields on the right bank of the Amur river. CNPC thus became the first and so far only foreign company to be allowed to exploit Turkmenistan's rich onshore gas reserves (see Turkmenistan section).

³¹ PSAs are common agreements between a country possessing oil (or other natural resources) and a company seeking to develop these resources. The PSA stipulates the respective shares of production the country and the company will receive after the participating parties have recovered a specified amount of their investment.

Discussions about a potential gas pipeline from Turkmenistan to China date back to the 1990s but it was only in April 2006 that a deal was signed. Then the project was implemented in an impressively short time. Construction started in 2007, and by the end of 2009 the pipeline was inaugurated. China financed the pipeline through loans, and most of the work was done by CNPC, in co-operation with local firms in the transit states. The Central Asia-China gas pipeline (CAGP) runs for 1,800 kilometres from Turkmenistan's onshore fields through Uzbekistan and Kazakhstan into Xinjiang. Together with the west-east connection that takes gas to China's industrial centres, the pipeline spans 7,000 kilometres, making it the longest in the world. In 2010, China signed agreements with Uzbekistan and Kazakhstan to link the CAPG to their national pipeline systems and so allow them to feed in their own gas for export to China.

The CAGP deal was also remarkable in being very comprehensive: China offered a very large long-term contract for gas purchases – some 40 bcm annually, with 30 bcm coming from Turkmenistan alone – alongside multi-billion dollar loans for the development of

³² *Chemen Durdiyeva, 'China, Turkmenistan, Kazakhstan and Uzbekistan launch Turkmenistan-China Gas Pipeline,' Central Asia-Caucasus Institute Analyst, January 20th 2010.*

the South Yolotan-Osman gas fields and for the construction of the pipeline (all to be repaid through gas deliveries). It packaged the energy contract with political partnerships, infrastructure assistance and diplomatic help in sorting out any transit issues with Uzbekistan and Kazakhstan.³²

China's ability to plan, fund and execute deals as comprehensive as the CAGP has raised the bar in the Central Asian energy game. The CAGP has considerably strengthened the hands of Central Asian leaders in their energy negotiations with Russia. Moreover, the Turkmen leadership has indicated to the EU that it would welcome a similar 'package deal' (including the construction of export pipeline infrastructure and finance for gas field development) to establish a bilateral energy relationship – something that the EU at present is ill-equipped to deliver.

The CAGP was the first and so far only big international gas pipeline to break Russia's stranglehold on Eurasian gas transport. It was also China's first major gas import pipeline (previously China imported gas only through LNG). The IEA estimates that if gas production in Turkmenistan and pipeline expansion develop as planned, China could obtain half of its gas imports from Central Asia by 2020.

The Chinese used the global financial crisis to further expand their influence in Central Asia, offering cash-strapped local regimes large-scale loans for economic stimulus and energy investments (as they also did in other parts of the world, including Russia and Latin America). In April 2009, China signed a \$10 billion 'loan-for-oil' deal with Kazakhstan. As part of that deal, CNPC also acquired a

share in a large Kazakh oil producer, MangistauMunaiGaz. In June that year, China announced another \$10 billion loan to the SCO to help struggling members through the downturn. And it committed \$4 billion to Turkmenistan for the development of the South Yolotan gas field.³³ This was followed by another \$4.1 billion loan to Turkmenistan in 2011 (see below).

³³ *Olzhas Auyezov, 'Kazakhstan expands China oil pipeline link', Reuters, July 1st 2009. 'China in Central Asia: Riches in the near abroad', The Economist, January 28th 2010.*

Nevertheless, China's involvement in Caspian energy sectors is still in the early stages. The IEA estimates that in 2009 the share of Chinese companies in total Caspian oil and gas production was around 7 per cent, mostly through Chinese investment in the Kazakh oil sector (although other estimates give China a higher share already). Private international (mostly western) oil companies had a share of 38 per cent. In Kazakhstan, China's share might even fall once the giant Kashagan field (developed without China) comes on stream. In Turkmenistan, on the other hand, China's share in total output will go up once CNPC achieves its production targets in the Bagtyyarlyk PSA area.

China's role and influence in the Caspian region looks set to grow since both sides are benefiting from the relationship. As China seeks to diversify away from the more unstable Persian Gulf, its demand for Central Asian oil is likely to increase. And now that China has already invested the capital in constructing the CAGP, Central Asian gas might well turn out to be cheaper, at least in the short to medium term, than buying LNG on the global market or developing domestic shale gas resources.

Conversely, Beijing's growing role in the region is helping to weaken Russia's political and economic influence over its neighbours. This has enhanced the Central Asian states' bargaining power in negotiations with Russia, allowing them to demand a higher price for their resources. From a transatlantic perspective, this is a positive development since it essentially gives the former Soviet states more

freedom of manoeuvre. China is also becoming an important source of capital for the Central Asian countries. Unlike much Western assistance, Chinese credit does not come with any political demands relating to governance and human rights (although 'buy China' clauses are often part of such deals). Much like in Africa, where China was initially welcome exactly because it did not demand any difficult reforms, the autocratic regimes of Central Asia prefer China as a lender because of this laissez faire attitude.

However, the Caspian states are wary of China's influence becoming dominant. China has not limited its relations in the region to oil and gas interests. Chinese investments have also flooded into other sectors, from agriculture to telecoms and electricity. Most of these deals involved top-level political negotiations since Chinese companies (unlike their Russian counterpart) lack established business links in Central Asia. Faced with the enormous difference in economic power, population and political influence, Central Asian leaders worry about the unbalanced and one-sided nature of their relationship with China.

Having been released from the controlling grip of the Soviet Union only two decades ago, the Central Asian countries are not eager to trade in one imperial master for another. As one Turkmen official puts it, "we do not want to be dependent on anyone. We set our energy policy as an independent, neutral state." Some observers claim that Turkmenistan is already having second thoughts about its

³⁴ Stratfor, 'Difficulties loom for a Turkmen-China energy deal', *Forbes*, March 8th 2011.

energy partnership with China. The volumes in the CAGP have not been rising as quickly as foreseen and China pays only around half of the price that Turkmen has demanded for its gas.³⁴

In Kazakhstan, anti-China sentiment is already more overt. In early 2010, following President Nursultan Nazarbayev's announcement that China wanted to lease a million hectares of farmland in Kazakhstan, hundreds (some observers said thousands) of Kazakhs took to the streets in protest, expressing their fears of growing

Chinese influence (including through corrupt deals) and mass Chinese immigration.

4 Turkmenistan: A case study in the new energy geopolitics

Turkmenistan is in many ways the epicentre of the new Eurasian energy geopolitics. Although Turkmenistan's oil reserves are modest compared with neighbouring Kazakhstan, its natural gas supplies are by far the largest in Central Asia. Following the first independent audit of Turkmen resources in 2008, the British firm Gaffney, Cline and Associates released an estimate that the giant South Yolotan-Osman field alone could hold reserves of between 4 and 14 trillion cubic metres (tcm), a multiple of what is assumed to lie in the offshore fields along Turkmenistan's Caspian coastline. Turkmenistan's own estimates of its gas resources exceeds 20 tcm.³⁵

³⁵ Richard Jones, speech to the Chatham house conference on 'The politics of Central Asian and Caspian energy', February 23rd-24th 2010.

Despite having a population of only 5 million, Turkmenistan consumes a sizeable amount of gas at home (20-22 bcm a year). Still because of its large production capacity, large volumes of Turkmen gas are available for export (unlike in Uzbekistan and Kazakhstan, for example). Although Turkmen resources are as yet relatively unexplored, most experts agree that they are enormous. The big question is whether Turkmenistan can attract the money and expertise to develop its resources and find ways to bring them to new markets.

A difficult place to invest

Until 2006, Turkmenistan was tightly ruled by its long-standing dictator, Saparmurat Niyazov, who kept the country largely isolated from the outside world while pursuing a wasteful personality cult. His successor, Gurbanguly Berdymukhammedov, while keeping a

tight grip on politics, has allowed a halting and piecemeal opening of certain sectors, including some parts of the energy sector. As part of the non-aligned, multi-vector foreign policy that he inherited from his predecessor, Berdymukhammedov has reinforced efforts to diversify energy export markets and attract money and expertise from various sources – not only China but also the Gulf states, the US and Europe. Foreign direct investment has risen from negligible levels before the turn of the century to \$1.4 billion in 2009, according to the World Bank. Nevertheless, Turkmenistan remains largely closed to outside investors, the bulk of economic activity remains state-controlled and foreign involvement is negotiated on a case-by-case basis with Turkmen leaders. Two state-owned monopolies, Turkmengaz and Turkmenneft, are effectively in control of the country's natural resources.

Turkmenistan's current policy is to offer international oil companies PSAs only for offshore reserves in its section of the Caspian. Malaysia's Petronas started exploring an offshore concession in the 1990s and produced its first gas in the summer of 2011. Germany's Wintershall surrendered its rights to another block after unsuccessful drilling. But its German competitor RWE acquired new concessions

³⁶ Marat Gurt, 'Turkmenistan welcomes US oil firms, eyes China loan', Reuters, August 13th 2010.

in 2009, as did Itera, Russia's biggest independent gas company. In the summer of 2010, Turkmenistan invited US companies Chevron and ConocoPhillips among others to submit bids for further blocks.³⁶

In the development of the larger and more easily accessible onshore gas reserves, foreign companies are currently only allowed to take part as service providers – which is not an attractive option for

³⁷ There is one further, much smaller exception in the oil sector. In 2008 ENI acquired a share in an onshore oil project granted to Britain's Burren energy in the mid-1990s.

most of them. The only recent exception is China's CNPC which has been given direct access to the onshore Bagtyyarlyk field.³⁷ What is striking is that Ashgabat appears to have been more open to signing service contracts for onshore development with companies from

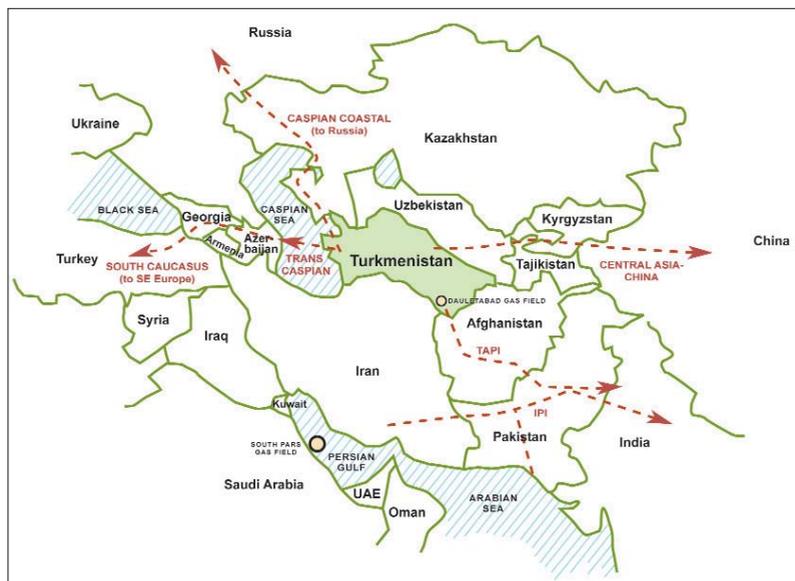
Asia and the Gulf states than with western oil companies. The initial 2009 contracts for assisting the development of South Yolotan went to CNPC, South Korean firms LG International and Hyundai, and two companies for the United Arab Emirates, Petrofac and Gulf Oil & Gas.

This apparent divide between onshore development by eastern groups and offshore by western companies has some geographic logic since the onshore resources are closer to China and Asian markets, while the Caspian looks more promising for exports to Europe and western markets. Moreover, Turkmenistan claims that it can develop its larger and more easily accessible onshore fields itself (with the support of services bought from western energy companies) whereas it admits that international expertise and capital will be needed for offshore exploration. Industry analysts predict that Turkmenistan's restrictive investment policies – together with limited export options – will slow down the development of its onshore resources.

Energy customers

In addition to its traditional customer, Russia, and its new export market, China, Turkmenistan is selling smaller amounts of gas to Iran. However, Iran's potential as a customer is limited by both international sanctions and Iran's own huge gas reserves. India and Pakistan (populations 1.2 billion and 190 million, respectively) could be potential costumers if a transit route through Iran or Afghanistan could be found. And to the west there is Europe, a slow-growing but potentially lucrative market with half a billion wealthy consumers. But again, transit issues, both across the Caspian and through Georgia, Azerbaijan and Turkey remain to be resolved.

Proposed Central Asian gas pipelines



Source: Canadian Centre for Policy Alternatives

Even more than is the case for the other Caspian producers, energy transit and transport are a big hurdle to the development of Turkmenistan's gas riches. Due to its position, any oil or gas leaving the country has to travel a large distance before it reaches the consumer nation. One continuous challenge for Turkmenistan, therefore, is to maintain workable relations with its neighbours – a task that was hugely complicated by Niyazov's isolationism.

An added complication is Turkmenistan's principle of 'selling gas at the border'. Unlike other producers, Turkmenistan does not get involved in international pipeline projects; it leaves it to its customers to figure out how to get the gas to markets. This has not deterred China, which has managed to build the CAGP in a very brief period of time while overcoming traditional rivalries between Turkmenistan and its neighbours, in particular Uzbekistan. But Turkmenistan's insistence on selling gas at the border has presented

the EU with major challenges since a westward pipeline would have to find a way to cross the Caspian – for which active Turkmen support is required.

Traditionally, Russia was Turkmenistan's only energy customer, buying the bulk of Turkmen output of usually around 50-60 bcm per year.³⁸ Since 1997, Turkmenistan has also been selling limited amounts of gas to Iran. But regular threats from Niyazov that Turkmenistan would sell its gas elsewhere unless Russia offered better terms were largely empty. Nevertheless, Russia made sure to sign large-volume, long-term agreements through which Turkmenistan would continue to commit its gas exclusively to Russia. Thus in 2003 the two reached an understanding to raise Turkmen gas deliveries to Russia towards 100 bcm annually over the next 25 years.

³⁸ *Turkmenistan used to treat statistics, including those on energy production, as state secrets. Although it has started publishing data, these are subject to wide margins of errors. According to the BP statistical review 2011, Turkmen gas output was typically 45-65 bcm a year in the 2000s. Turkmen officials tend to give higher figures while independent analysts rely on more cautious assessments.*

All that changed with the agreement on the CAGP in 2006. Russia quickly promised to start paying more for Turkmen gas. However, as European gas demand fell in 2009 and Russia's own economy descended into recession, it no longer needed Turkmen gas to make up its gas balance. The relationship reached a low point in April 2009 when a large explosion on the main gas line between the two countries cut off the gas flow altogether. Turkmenistan blamed Russia for deliberately sabotaging the pipeline so that it would not have to pay higher gas prices agreed before the financial crisis hit European demand. Russia denied such charges. Without an alternative outlet, Turkmen gas production (and GDP) slumped in 2009, serving as another reminder to the Turkmen leadership of the importance of diversifying away from Russia. In December 2009, Russia and Turkmenistan agreed to resume gas flows and to increase them to up to 30 bcm a year (price agreements were not disclosed).³⁹ However, in 2010 and

³⁹ Vladimir Socor, 'Russia resumes gas imports from Turkmenistan', *Asia Times Online*, January 6th 2010.

2011, Russia has only been buying about a third of the agreed maximum volume.

Will China replace Russia?

Unless Russian demand for Turkmen gas recovers (or the Europeans manage to access Caspian gas directly), China will become the main market for Turkmen gas in the near future. CNPC is already the largest foreign company in Turkmenistan and has, as explained, a privileged position. China is providing much of the finance needed to increase gas production: in addition to the \$4 billion loan in 2009, China lent Turkmenistan \$4.1 billion in 2011. Turkmenistan promised to repay these loans through gas deliveries – locking it into a long-term energy relationship with China.

From December 2009 until August 2011, Turkmenistan exported almost 14 bcm to China via the CAGP, according to CNPC. China and Turkmenistan had initially agreed that the shipped volume should rise to 40 bcm by 2012 (later rescheduled to 2015) but,

⁴⁰ Calvin Lee, 'China's CNPC says Central Asia gas pipeline capacity to hit 60 bcm by 2015', *Platts*, August 31st 2011.

following a meeting in March 2011 between Turkmen Deputy Prime Minister Baymyrat Hojамuhammedov and Chinese officials, a further increase to 60 bcm by 2015 has been touted.⁴⁰

In June 2010, President Berdimukhammedov announced the construction of a trans-Turkmen pipeline that could be used to connect the CAGP to the country's western resources – reserves traditionally reserved for export to Russia and, more recently, eyed by European companies for westward shipment through Nabucco. Turkmen officials have said that the east-west pipeline could be used in both directions, which means it could also transport gas from the Dauletabad field, and perhaps later South Yolotan-Osman, westward to the Caspian. However, given the thickening energy links between Turkmenistan and China, while Turkmen deliveries to Russia remain uncertain and EU-Turkmen relations

largely declaratory, it looks more likely at present that the flow of gas will be west to east, towards China. Despite assurances by the Turkmen president that the trans-Turkmen pipeline would make the most of indigenous expertise and capital, it would be a surprise if Chinese companies and money did not have some role to play in its construction.

In all this activity, the EU has so far been a marginal player. Turkmen officials, as well as the president, have repeatedly expressed an interest in selling gas to European markets as part of Turkmenistan's diversification strategy. Ashgabat has followed the developments surrounding the southern corridor projects with great interest. However, there is a certain amount of scepticism whether such sales will materialise and whether they will be commercially viable.

Turkmen officials sometimes contrast the EU's gradual and incoherent approach with China's determination in getting the CAGP built and its willingness to provide the resources needed for it. Since 2010, the EU has reinforced its efforts to forge an energy relationship with the Central Asian state, with high-profile visits of Energy Commissioner Oettinger and Commission President Barroso to Ashgabat and by instructing the European Commission to help negotiate a possible trans-Caspian pipeline (see box page 56). However, as described earlier, the EU's energy diplomacy is still in its infancy while individual EU countries, in particular Germany, Italy, France and the UK are pursuing their own bilateral relations with Turkmenistan.

Although the US has no immediate need for Caspian gas, Washington has long believed that an energy link between Turkmenistan and Europe would be beneficial – not only for European energy security but also for the strategic balance in the Caspian region. Following the blueprint of the BTC pipeline, the Obama administration has sought to help remove the obstacles in the way of Nabucco and the southern corridor while also promoting a greater role for American and other international oil companies in

the Turkmen energy sector. Similarly, the US has supported the idea of establishing an energy link between Turkmenistan and India, via Pakistan and Afghanistan, as a way of fostering regional economic links and stability.

The missing link to the south

While energy relations with the west remain underdeveloped and those with Russia are surrounded with tension, Turkmenistan is concerned about becoming overly reliant on Chinese demand. It is therefore keen to find alternative customers in South Asia.

So far, no big pipelines exist between Turkmenistan and the countries that lie to its south. Iran is the only country in this region that has a pipeline link to Turkmenistan. It currently imports 5.8 bcm annually and aims to increase this amount to 20 bcm. Iran holds the second largest gas reserves in the world after Russia. However, due to a lack of infrastructure and investment, Iran imports gas from Turkmenistan to supply northern border towns that are distant from its southern gas fields.

The TAPI pipeline, named after the four countries through which its planned route passes (Turkmenistan, Afghanistan, Pakistan and India), is the most ambitious project to transport Turkmen energy southwards. Stretching over 2,000 kilometres from the Dauletabad gas fields in southern Turkmenistan to India, TAPI would pass through the Helmand and Kandahar provinces in Afghanistan before reaching Pakistan. The project was conceived prior to the latest Afghan war and had to be shelved following the US-led intervention. On the 25th April 2008, however, the four countries involved signed a framework agreement designed to lay the foundations to begin TAPI's construction, with support from the Asian Development Bank.

The feasibility of TAPI is questionable, because of the security situation in Afghanistan and the long-standing tensions between

India and Pakistan. Alternative routes have been under discussion. In 2009 Pakistan suggested circumnavigating the more dangerous areas of Afghanistan by redirecting the pipeline to Gwadar in southern Pakistan, near the border with Iran. Another plan involves leaving out Turkmenistan altogether and instead building a supply line from Iran's southern gas fields through Baluchistan (and perhaps again Gwadar) in Pakistan and on to India. As well as involving fewer security risks, the IPI (or peace pipeline), as it is known, also has the economic backing of China. Since the IPI would give Iran another outlet for its gas, it may create additional Iranian demand for Turkmen gas imports. It is, however, fiercely opposed by the US. The US instead supports the TAPI pipeline because it would create transit revenue and jobs in war-ravaged Afghanistan. Moreover, an energy link could help to foster co-operation between Afghanistan, Pakistan and India.

Unless the security situation in Afghanistan improves, the TAPI members may well back one of the alternative routes. The main transit point of both these alternatives is Gwadar, which has received heavy Chinese investment over the last decade and might come under Chinese operation in the future.⁴¹ Hypothetically, if this allowed the Chinese to control shipments through the port, a TAPI that relied on Gwadar as a main outlet would not contribute greatly to Turkmenistan's objective of diversifying its gas clients.

⁴¹ *Gwadar was built by China as a turn-key operation, and in 2011 there were talks between Pakistan and China whether China would take over the operation of the port in the future. Peter Lee, 'China drops the Gwadar hot potato', Asia Times, May 28th 2011.*

The trans-Caspian link

⁴² Robert Cutler, 'Kazakhstan looks at the trans-Caspian for Tengiz gas to Europe', *Central Asia-Caucasus Institute Analyst*, January 28th 2009.

Plans for a trans-Caspian pipeline date back more than a decade and were promoted by the US in the mid-1990s and by the EU more recently. A trans-Caspian link would allow Turkmen (and maybe Kazakh⁴²) gas and oil to flow westwards to Europe; and hypothetically Azeri gas to flow eastwards to China and other Asian markets.

Russia and Iran insist that the Caspian sea must first be delineated before any trans-Caspian pipelines can be built. There have been a series of bilateral treaties between littoral states but no agreement among all the Caspian countries. Such an agreement has been impeded by disputes over whether the Caspian is a sea or a lake, which matters for the legal regime applicable to the delineation of sea borders and the allocation of sub-sea resources. Russia and Iran also often cite ecological reasons for their opposition to trans-Caspian pipelines. More likely, Russia opposes a trans-Caspian link because it would weaken its control of Caspian energy and undermine its ability to block direct gas shipments from Turkmenistan to the EU.

Turkmenistan and Azerbaijan, backed by many legal experts, claim that all that is needed for a trans-Caspian link is an agreement between the two states through whose waters the pipeline would run. However, Turkmen-Azerbaijani relations have often been tense, mainly because of a dispute over an off-shore gas field between the Turkmen and Azerbaijani coasts,

called Serdar by Turkmenistan and Kyapaz by Azerbaijan. In September 2011, the EU member-states instructed the European Commission to negotiate a legally binding agreement with Azerbaijan and Turkmenistan on the construction of a trans-Caspian pipeline.⁴³

⁴³ European Commission, 'EU starts negotiations on Caspian pipeline to bring gas to Europe', *press release*, September 12th 2011.

Some observers think that Turkmenistan is becoming more active in trying to remove the obstacles to a trans-Caspian link – which would be a departure from the country's traditional stance of selling gas at the border.⁴⁴ Nevertheless, it appears that Turkmenistan is still too concerned about Russia's reaction to a trans-Caspian deal to force the issue, especially since the prospects for Nabucco and the size of a possible gas contract with European companies remain uncertain.

⁴⁴ Vladimir Socor, 'Turkmenistan demonstrates commitment to trans-Caspian gas pipeline', *Georgia Daily*, March 9th 2011.

The European Commission has attempted to address this uncertainty by exploring the idea of a 'Caspian development corporation', effectively a buying consortium that would allow European companies jointly to offer a sizeable gas contract to Turkmenistan and thus incentivise the country to address the trans-Caspian issue more forcefully. However, the idea did not find many backers among EU governments and European energy companies – although two of the energy companies involved in the Nabucco consortium, RWE (Germany) and OMV (Austria), have looked at establishing a similar buying scheme. Some western oil companies have started exploring the idea of shipping gas across the sea in the form of LNG or CNG (compressed natural gas) to circumvent the complications involved in pipeline projects. However, CNG technology is as yet underdeveloped and LNG would be a very expensive option.

5 Conclusion

In theory, Russia and China could both gain significantly from establishing an energy partnership. In practice, their bilateral energy relationship is likely to remain well short of potential. The mistrust between the two powers is too great. In particular, Russia fears that it could end up as an 'energy appendix' to the rising superpower. China has found it easier to secure resources from countries that are less encumbered by geostrategic considerations.

China's focus has moved to the energy-rich nations along its western frontier. It has made significant investments in various exploration and development projects in Turkmenistan and Kazakhstan, and started to construct large-scale pipeline projects for the transport of Central Asian oil and gas eastwards. China is competing with Russia, the EU, and the southern Asian block of Pakistan, India and Iran for its share of Central Asia's relatively unexplored oil and gas resources. Unlike in the 19th century imperial 'great game' between Russia and Great Britain, however, the Central Asian states are not passive entities whose resources are free for the taking. Turkmenistan and Kazakhstan, in particular, are emerging as independent players on the Eurasian energy map.

From the perspective of the Central Asian countries, China's growing involvement has many benefits. It provides much-needed investment capital and it helps these countries to break their dependency on Russia. With the recent memory of Soviet Russia monopolising the exploitation of their resources, both Kazakhstan and Turkmenistan have adopted a multi-vector approach in their energy strategies. In its most basic sense, this means that the vast oil fields of Kazakhstan and gas fields of Turkmenistan are open to competition. In many markets such an approach would promote

efficiency and diversity. However, if Chinese influence becomes dominant, the benefits of such competition would be lost, particularly given China's preference for government-to-government deals and its apparent lack of interest in good governance. Although China's approach to Central Asia is very different from Russia's post-Soviet quest for continued influence, there are signs that China could become the region's new hegemon.

If current trends persist, China will continue to expand its energy infrastructure westwards, buying up a large portion of Central Asian and Caspian resources. Russia will continue to lose influence in the region as it will have to compete for Central Asian resources that it once took for granted. South Asian markets look appealing for producers such as Turkmenistan but the security risks involved in shipping oil and gas southwards through Afghanistan and Pakistan are formidable. The slow progress on the southern corridor of pipelines from the Caspian to the EU means that Europe may well miss out on the rich gas reserves in Turkmenistan.

The following steps would allow the EU, and the West in general, to play a more significant part in the energy geopolitics of Central Asia and the Caspian.

- ★ With China (and other powers such as Iran or Turkey) playing a growing role in Central Asia, policy-makers in the US and the EU need to rethink their view of Russia's involvement in the region. Russia's role in the post-Soviet space will remain important – because this is a Russian priority and because Russia has strong cultural, historical, business and language links to the Central Asian states. But Russia is increasingly just one player among others. In today's geopolitical landscape in Central Asia, Cold War-type thinking that focuses on 'rolling back' Russian influence would not benefit anybody.
- ★ The EU's fledgling Central Asia strategy has not so far had a noticeable impact. Central Asian states see the EU as a benign (if

bumbling) actor. The EU is far away, and thus does not pose any threats to these countries' independence but could potentially help them strengthen their hands vis-à-vis Russia and China. Given that the resources the EU can devote to this part of the world are likely to remain limited, it should shorten its list of priorities, perhaps to focus on good governance, regional co-operation and energy. Individual EU member-states need to be careful that their bilateral dealings with Central Asian states do not undermine the effectiveness of a joint EU strategy.

- ★ Neither Chinese nor Russian involvement is likely to encourage reform and liberalisation in the Central Asian states. On the contrary, competition between Beijing and Moscow for influence, and their heavy focus on incumbent rulers, is likely to cement autocratic structures and foster cronyism and corruption. Autocratic and non-accountable regimes tend to be less stable in the medium to long term. They are less suited for dealing with social discontent, ethnic and religious strife or extremism. Instability in Central Asia directly impinges on Western energy and security interests. The EU and the US should therefore continue their efforts to nudge the Central Asian states towards improved governance and more openness.
- ★ Such efforts will only be fruitful, however, if the Central Asian countries regard their relationships with the EU and the US as beneficial. Energy must be an integral part of such a beneficial relationship. The EU should continue its efforts to establish a southern corridor that will make it possible to ship Caspian and Central Asian gas directly into the EU. In particular, the EU could help to resolve the trans-Caspian issue by backing the Commission's mandate to help broker a deal on the Serdar/Kyapaz dispute and on a trans-Caspian link between Turkmenistan and Azerbaijan.
- ★ China, like Russia, tends to rely on non-transparent, top-level deals in its energy relationships with Central Asia. Such deals

do not help improve the business environment in the Central Asian states. There is a real risk that Kazakhstan and Turkmenistan will not be able to attract the capital, technology and expertise needed to develop their promising resources unless the investment climate improves. The West should explore ways of helping these countries to improve local investment conditions in the hydrocarbon sector, for example through the Extractive Industries Transparency Initiative or on the basis of the Energy Charter Treaty.

★ Western engagement in the energy sectors of Central Asia should not be divorced from security interests, which include NATO's involvement in Afghanistan. The US and other NATO member-states should build on the relations they have developed with Central Asian states through the management of supply routes and military bases. Although plans for TAPI appear far-fetched, NATO members engaged in Afghanistan should bear in mind that the project has strong backing from Turkmenistan and Afghanistan.

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RUSSIA, CHINA AND THE GEOPOLITICS OF ENERGY IN CENTRAL ASIA

Alexandros Petersen with Katinka Barysch

Russia is the world's biggest hydrocarbon producer. China is one of the world's largest and fastest-growing energy markets. The two are neighbours. Yet their energy relationship is very thin. Instead, they compete for vast and largely unexplored Central Asian resources. As Kazakh oil and Turkmen gas start flowing to China, Russia's traditional dominance in the region is diminishing. However, the Central Asian states are not passive pawns in a new 'great game'. The EU and the US can help these countries to turn the new energy geopolitics to their advantage.

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