argusmedia.com

March 2023

Argus Special Report:

Ukraine Anniversary — Energy Politics In Flux

INTRODUCTION: A war without winners

The one-year milestone for the war in Ukraine represents a tragedy for the Ukrainian people, and a humiliation for Russian president Vladimir Putin, whose hopes of a quick and easy victory disappeared many months ago. But it also marks a sobering moment of reflection for the rest of the world, and especially Ukraine's western allies, who will now understand that they face a long conflict and a test of their resilience, with no prospect of a return to the status quo ante.

Energy markets have been at the heart of the conflict, weaponised by both sides, and roiled in ways unimaginable even just 12 months ago. Europe and Russia have severed an interdependent energy relationship that survived the Cold War, while government interventions in energy markets — import bans, price caps, strategic stock releases — have reached a scale and sophistication never seen before.

Almost every facet of the global energy system has been affected by the conflict, and this Argus special report, which draws its content from a range of our business intelligence reports, including *Petroleum Argus*, *Argus Eurasia Energy*, *Argus China Petroleum* and *Argus Gas Connections*, seeks to take stock of how the war has shifted the tectonic plates of global energy trade, and to ask questions about what further change lies ahead.

Geopolitically, the most striking aspect of the conflict has been the contrast in perspectives on the invasion between the west and much of the rest of the world. For every country supporting Ukraine and willing — so far — to pay the price in terms of economic and energy disruption, there is another, such as China or India, taking a more equivocal position and happy to play the situation to its strategic advantage. The west's priorities, very clearly, are not shared by the rest of the world.

This realignment has significant political consequences. The biggest energy policy challenges — decarbonisation, but also security and, for the many developing economies uninvolved in the war but deeply affected by its consequences, energy poverty and energy access — require global co-operation. Such collaboration has created fragile momentum on addressing climate change in recent years, but the tensions and divisions created by the Ukraine conflict threaten to stall this progress, and to make addressing other global energy policy issues much more complicated.

On energy security, India and China's perspectives, for example, will be very different from Europe's, given their ongoing access to Russian oil and gas. On climate policy, gas may look a more plausible element of transition planning to governments with no misgivings over Russia's position as the world's biggest resource holder, while Europe's prominent position driving decarbonisation and green energy investment may be compromised by the economic impact of higher energy prices, and the budgetary cost to its governments — already hurt by the Covid-19 pandemic — of trying to shield their citizens from those prices.

Arguably the most important lesson to be taken from the conflict so far is that the twin questions of energy security and energy transition are best addressed by dependence on a diverse range of both fuels and suppliers. But applying that lesson in an increasingly divided world, where politics and ideology trump economic logic, presents an altogether greater challenge.

The fear is that this is only the beginning, and that as the conflict drags on, and frustration and weariness grow on both sides, more desperate measures are pursued that deliver further division and disruption to international relations and global energy trade — a scenario under which nobody wins.

ENERGY SECURITY: Simple lessons, hard truths

The war in Ukraine has forced policy makers to re-engage with questions of energy security that many thought had been consigned to history. A year into the conflict, against a backdrop of increasing international discord, how those questions will be resolved remains a moot point. But some lessons are emerging that underline both the scale of the challenge, and how it might be tackled.

Arguably the most important are the simplest — that energy security comes at both a literal and figurative cost, and that achieving energy security in tandem with those other elements of the "energy trilemma" — affordability and sustainability — is going to require pragmatism, trade-offs, and uncomfortable choices.

To be sure of supply, you have to downgrade other stipulations — maybe you have to pay more than you would like, maybe the energy is dirtier than you would like. That may seem an unattractive or wholly unacceptable compromise to some policy makers, but the idea that secure and low-carbon energy will not, now more than ever, command a premium, or that cheaper energy options will always be clean and secure, is plainly fanciful. European consumers have been reminded of this lesson over the past 12 months, paying higher prices to attract LNG to replace Russian pipeline gas. They may have to pay higher prices still later this year if China re-emerges as a more vigorous competitor in global LNG markets.

Nonetheless, for some consuming countries, the re-emergence of supply security as an energy policy priority has come as almost as big a shock as the higher energy prices they have faced. This has highlighted a creeping complacency among some policy makers, who have misinterpreted the benefits of free trade and globalisation as a licence to forget basic energy security principles and drift into dependence on one or a few key suppliers.

The conflict in Ukraine has reinforced some of these lessons, but the hard truth for energy policy makers and strategists around the globe is that they have been clear enough for years to anyone who has been paying attention — or thinking rationally, rather than ideologically. The most obvious recent reminder on this point came with the outbreak of Covid-19, as the impact of the pandemic exposed the vulnerability of complex international supply chains and long-haul commodity trade. But there have been others. Two years ago, residents in Texas found themselves facing intermittent power outages and were obliged to boil drinking water because of how the state had chosen to manage its electricity market, eschewing robust connections with the rest of the US power grid and prioritising free-market flexibility over more costly reliability.

Flexibility and innovation

Avoid complacency, embrace pragmatism when tackling complex energy policy challenges — these seem like clear and obvious lessons in the current crisis, but prospects for the world applying them are mixed. In fairness, innovation, flexibility and even creativity have not been in short supply in some of the policy responses to the crisis. In the US, for example, President Joe Biden came to office with a clear and robustly ideological "green" energy agenda, focused on reducing US emissions and promoting low-carbon energy investment. His administration had little interest in forming alliances with either domestic or overseas oil and gas producers, but the Ukraine crisis, and the familiar US political spectre of rising gasoline prices, forced a change of approach.

Biden's outreach to Opec did not produce its desired results, but more regular contact between administration officials and US oil and gas producers has helped the White House to chart better policy. The so far smooth implementation of price caps on Russian oil exports has been helped by multiple rounds of consultations with specific industry segments. And the price caps themselves, which provided a sensible corrective to an ill-considered EU embargo that included punitive measures against shipping and insurance, also reflect creative thinking in Washington that recognised the energy security risks of heedlessly targeting supply alone.

But there has also been a tendency among some policy makers to use the crisis to promote their own pre-existing energy policy agenda. For many petroleum-producing countries, the renewed emphasis on energy security has presented an opportunity to reassert the credentials of oil and gas as a source of stable supply, ignoring the fact that one of the world's biggest oil and gas producers — and its biggest gas resource holder — is at the heart of the crisis.

Similarly, some western governments and other leaders have doubled down on decarbonisation and clean energy as a Panglossian cure for the world's energy security ills — UN secretary-general Antonio Guterres last year suggested that renewables could be "the peace plan of the 21st century" — overlooking the supply chain and resource access rivalries that are already manifesting themselves in relation to battery metals, electric vehicles and clean hydrogen.

All in it together

But a more fundamental energy security challenge lies in the wider breakdown in global diplomacy and multilateral decision-making that the Ukraine war is reflecting and exacerbating. Energy security, like energy transition, is a challenge best addressed globally, through coherent multilateral policy making, promoting trade and technology development that enable countries to establish diversified energy supplies that in sum tick the various energy trilemma boxes.

Prospects for that kind of coherent global policy making are grim. The conflict in Ukraine has strengthened some alliances — Russia has sought to draw closer to China, while key western institutions such as Nato and the G7 have shown remarkable unity of purpose. But relations between other key energy market actors are poor, and getting worse — think of the US and Saudi Arabia, or the US and China, nominally climate policy allies as recently as 2021.

Mistrust in such relationships makes greater anxiety over energy security more likely. This in turn encourages resource hoarding and bilateral rather than multilateral trade, undercutting confidence in market-based solutions to matching supply and demand, and creating a vicious circle — the more that policy interventions complicate the global energy security picture, the more further such interventions become likely, exacerbating rather than solving the problem.

This leads back to the question of cost. Energy security — just like energy transition — comes at a price. But it is a price that some countries will find difficult to pay in the years ahead, particularly if they also aspire to deliver on decarbonisation goals, courtesy of the structurally higher inflation the energy price fallout from the war in Ukraine has introduced into the global economy.

That in turn leads back to the trade-offs and compromises of the energy trilemma. Most of the energy security answers policy makers have come up with to date have focused on supply — politicians have been largely unwilling to mandate energy use restrictions and force further hardship on populations and economies weary from years of Covid-19 lockdowns. On that score, they have allowed higher prices to do the hard work, with some striking results. But perhaps the next step in the evolution of energy security thinking should be for consumer governments to think harder about what pragmatic and creative steps they can take to manage demand and improve efficiency.

GAS MARKETS: Still seeking equilibrium

Russia had already started to wreak havoc on the world gas market even before its troops began to cross the border into Ukraine on 24 February 2022. State-controlled gas exporter Gazprom stopped offering spot supplies to Europe in the second half of 2021 and neglected to fill the huge storage facilities it controlled there, contributing to the region starting winter 2021-22 with gas stocks at their lowest in recent years. Spot gas prices soared to then-historic highs through late 2021 as firms scrambled to shore up stocks for the winter.

The worst was yet to come. Prices surged to a new record immediately after the invasion of Ukraine, despite no immediate disruption to Russian gas flows, as some European countries clamoured for an embargo on Russian gas imports.

TTF front-month price €/MWh

But even these prices were dwarfed by those later in the year, after the much-feared disruption to Russian supply eventually materialised (*see graph*).

Soaring prices reflected a global market striving to find a new balance amid the withdrawal of a key supplier. The vast volumes that used to flow to Europe had no alternative market immediately available, forcing prices up to levels that encouraged demand curtailment and fuel substitution. And geographical price spreads — between Europe and Asia, and within regional European markets — had to incentivise maximising supply and curbing demand where shortages were most acute.

But the surge in prices also reflected an endemic under-pricing of geopolitical risk in the European gas market. For years, a comfortable reliance on flexible Russian supply had allowed the region not to invest in strategic storage, or to secure alternative supply options that could fill in for the loss of Europe's key supplier. Now that the unthinkable had happened, the market — and governments — had to scramble to make up for lost time.

For now, these market signals have successfully triggered a reconfiguration of the global market. European governments have been encouraging consumers to reduce heating demand, while gas has been replaced with coal, oil or LPG in industry and power generation where possible. And Europe has made significant progress towards solving the infrastructure limitations that prevented a full replacement of Russian gas. But the costs have been eye-wateringly high.

To secure alternative supplies in the form of LNG, Europe had to draw supply away from Asian and Latin American markets. And record-high energy prices filtering through the economy have fed rampant inflation, forcing central banks to raise interest rates to levels not seen since before the 2008 financial crisis.

Balancing act

The most immediate risks of supply shortages and energy rationing appear to have subsided — for now. European gas stocks are on course to end the winter at their highest in recent years. But the global gas market is still far from achieving a new equilibrium. In the near term, a rebound in Chinese demand as Beijing ends its zero-Covid policy, and the possibility of lower prices triggering a demand recovery elsewhere, could still reignite price rallies in the coming months.

Where the market will find balance in the longer term is also unclear. Governments and consumers are still deciding what portion of energy demand previously met by Russia can be permanently replaced by alternative fuels, or through improved efficiency. Europe's carbon-reduction pledges make committing to long-term gas supply contracts problematic. These uncertainties perhaps explain why the highest prices ever seen in the gas market are not making investment decisions in new supply any easier. But so long as consumer countries remain reluctant to invest in gas supply security, the high price volatility of the past 18 months may become the new normal.

CLIMATE POLICY: Security issues cloud horizon

The war in Ukraine, and the consequent revival of concerns around energy security, has had major implications for climate policy, pushing advanced economies to intensify existing climate goals, but also giving fossil fuel producers an argument for their continued use.

OECD leaders, as well as the group's influential energy watchdog, the IEA, have moved rapidly to stress that a pivot away from Russian oil and gas and increased deployment of renewables would address all three aspects of the "energy trilemma" — decarbonisation, affordability and security of supply. But leading oil and gas producers have emphasised their credentials as reliable suppliers, while some have placed the focus on tackling emissions, not stigmatising their source.

And those OECD governments have faced multiple challenges and criticism, with some bringing coal-fired power generation back on line and extending the life of nuclear power plants — controversial in certain jurisdictions — as well as because of the rocketing energy prices faced by consumers.

In Europe, the EU presented its REPowerEU plan in May, designed to wean the bloc off imports of Russian fossil fuels but equally to address the climate crisis, through energy efficiency improvements and investment in renewables. The EU has been unswerving in its certainty that the war and subsequent phasing out of Russian fossil fuel imports is an opportunity to speed up the energy transition.

The early rhetoric has filtered through into concrete legislation. The EU now plans to step up the ambition of its climate targets once all elements of its Fit for 55 package have been agreed. It will increase its legally binding target for reducing greenhouse gas (GHG) emissions to 57pc by 2030, from a 1990 baseline, up from the previous 55pc. These emissions cuts will afford the EU a strong geopolitical advantage, commission executive vice-president Frans Timmermans said last month.

The US swiftly followed suit. President Joe Biden unveiled the Inflation Reduction Act (IRA) in August — generating sweeping tax incentives and direct spending to cut GHG emissions and drive renewables and green industry. The IRA is the largest climate measure ever to pass in the US, and how it "came about was because of the Ukraine war, let's be honest", US senator Joe Manchin told delegates at the World Economic Forum in January.

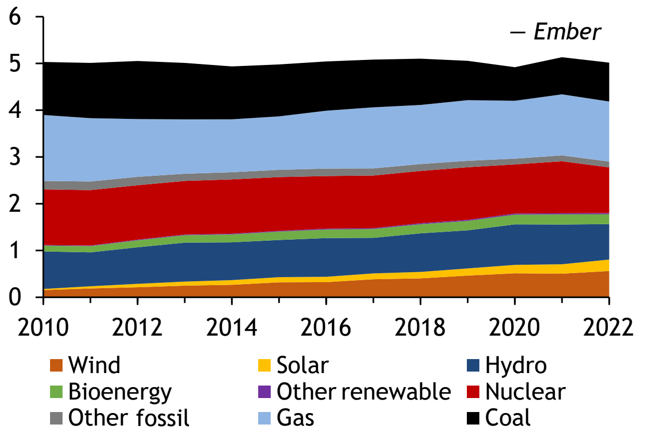
Dash to splash cash

The new climate policy initiatives from the US and the EU have resulted in significant amounts of cash for the energy transition — $369bn from the IRA and up to €270bn ($290bn) from the REPowerEU, although this is in a context of high inflation for both jurisdictions. The policies should hasten decarbonisation for both, notwithstanding some concern among EU leaders that the mammoth scope of the IRA might trigger a "green subsidy race".

The US and the EU have not been alone in taking steps over the past 12 months to accelerate decarbonisation — the IEA's projections of a substantial rise in renewables capacity over the next five years are also driven by China's latest five-year plan. But the US and EU measures have been notable for their direct link to tackling long-term energy security concerns triggered by the Ukraine war.

In the shorter term, the EU's return to coal has been a bitter pill to swallow for many governments, some of which — such as Germany's Green coalition — were elected on the back of their

European electricity generation *PWh*



environmental pledges. But increased coal burn in winters 2022-23 and 2023-24 is unlikely to affect countries reaching climate goals in the long term, a study by climate and energy think-tank Ember found. European coal phase-out dates, which are some of the earliest in the world, remain largely unchanged, while some coal-fired plants, kept on reserve by governments to meet power demand, have not yet been used.

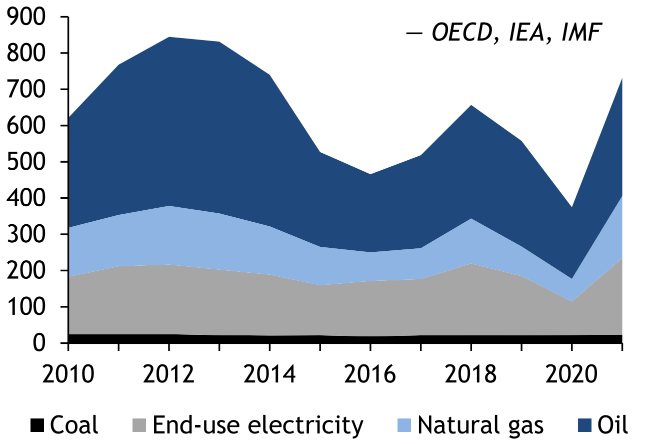
But Europe scrambled to replace its imports of Russian gas. The region ramped up LNG deliveries, and some countries were forced to rapidly add infrastructure — Germany built its 5.8mn t/yr Wilhelmshaven LNG import terminal in a matter of months. EU leaders have stressed that new gas infrastructure will be future-proofed to carry hydrogen once that nascent sector develops.

Natural gas development was a key topic at November's UN Cop 27 climate summit at Sharm el-Sheikh in Egypt. A reference to low-carbon fuels added to Cop 27's final text at the last minute rekindled a debate about support for gas and exposed unfulfilled pledges made a year earlier to end international financing for fossil fuel projects. "The Egyptian [Cop 27] presidency produced a text that clearly protects oil and gas petro-states and the fossil fuel industries," noted Laurence Tubiana, chief executive of net zero advocacy group the European Climate Foundation.

Fossil fuels were a focus at Cop 27 from the start, as producers flagged their positions as reliable suppliers. At the summit's opening session, UAE president Mohammed bin Zayed al-Nahyan told delegates that his country would continue to supply oil and gas "for as long as the world needs".

Cop 27 tackled several complex issues, including loss and damage — which refers to the destructive effects of climate change that communities cannot adapt to, such as rising sea levels — and how best to ensure a just transition for developing economies. Talks on mitigation took place

Fossil fuel subsidies, global estimates *$bn*



behind closed doors, but ministers told *Argus* that it was a battle even to avoid backsliding on commitments made in 2021, let alone go further on scaling back use of fossil fuels. Developing and climate-vulnerable countries scored a victory in the agreement to establish a loss and damage fund, but missed out on their push for emissions reduction. Reduced action on mitigation will simply push the bill for loss and damage higher.

It is difficult to ascribe the outcome of Cop 27 wholly to the war in Ukraine. But the increased focus on and concern around energy security has provided producers and those supportive of fossil fuels with a ready-made argument for their continued use, albeit one that overlooks the energy security problems that oil and gas' geopolitical risk profile has often caused, not least in the current crisis.

Keeping 1.5 alive

Cop 28, scheduled for December in the UAE, will set the next steps for global climate policy. The decision to name the chief executive of Abu Dhabi's state-owned oil company Adnoc, Sultan al-Jaber, as the summit's president rang alarm bells for environmental campaigners. But al-Jaber has emphasised the need to slash emissions and expressed a firm commitment to keeping alive the UN Paris climate agreement's goal of limiting global warming to 1.5°C. "The goal of keeping 1.5°C alive is just non-negotiable," he told the World Sustainable Development Summit in New Delhi in February.

Al-Jaber may have his work cut out. Cop 28 will see the outcome of the first global stocktake measuring countries' progress against the Paris accord, but the backdrop is bleak. Climate pledges put the world on track for around 2.5°C of warming by the end of the century, according to the UN. But UN Framework Convention on Climate Change executive secretary Simon Stiell last week reminded parties of the final Cop 27 text, which stressed that the "increasingly complex and challenging global geopolitical situation… should not be used as a pretext for backtracking, backsliding or deprioritising climate action".

RUSSIA: The cost of miscalculation

Propaganda videos emerged in Russia last year depicting Europeans freezing in the dark, reduced to eating family pets and hitching horses to fuel-less cars. The clips were mostly released after Russia slashed gas supplies to the EU, essentially in retaliation for opposition to the invasion of Ukraine. Absurd as they were, the videos appear to have reflected a genuine conviction in the Kremlin that European dependence on Russian energy — gas in particular — ran so deep that the EU economy would be ruined by its absence.

Europe will, of course, pay an economic price for severing its energy ties with Russia. But the idea that Europe was fatally dependent on Russian gas proved to be as ill-founded as the assumption that the invasion of Ukraine would be a walkover for Russia's military. One year on, Ukraine has not only held Russia off, but succeeded in pushing Moscow's forces back in many areas. And European economies have largely weathered a severe reduction in Russian gas deliveries — to zero in many countries — thanks to supply diversification, energy-saving measures and, it must be acknowledged, a relatively mild winter.

President Vladimir Putin's invasion of Ukraine is a neo-imperial project, an attempt to reclaim what he referred to last month as Russia's "historic frontiers". But battlefield losses now run into tens of thousands of troops, as well as huge quantities of military hardware. And, in what Moscow insists is an economic war waged against it by the west, Russia has lost the main lifeline of the post-Soviet economy — access to European energy markets.

In his state of the nation address to the Russian parliament on 21 February, Putin highlighted the resilience of the Russian economy in the face of sanctions, insisting, essentially, that it does not need the west as a trading partner. Putin and other Russian officials have repeatedly claimed that Russia will find new markets for its oil and gas, primarily in the east. But this glosses over the complexity of the problems Moscow faces.

It is too early to judge the full extent to which Russia will be able to redirect crude and products now denied access to Europe. Crude flows to alternative markets — particularly India — which began before the 5 December EU import ban, may be more or less sustainable. But early signs suggest that finding new destinations for products barred from the EU since 5 February will be much harder.

The missing link

Putin recently hailed Gazprom's enormous reserves — the company's potential as a gas producer exceeds that of any single country, he said. But he failed to point out that cutting supplies to Europe has left a significant portion of those reserves at least temporarily stranded, until a missing link between west Siberia and China can be created, a process that would take several years. And that assumes China wants more Russian gas, which Beijing has not so far confirmed.

China figures disproportionately in Russia's hopes for redirecting energy supplies away from the west, and Gazprom certainly has few other options for its gas. Beijing may well be ready to oblige, but if so, it will be China that sets the price and it is unlikely to be one favourable for Moscow.

The invasion of Ukraine was a massively misconceived undertaking on every level, based on erroneous estimations of Russia's military capability and Ukraine's ability to resist. Moscow also completely failed to anticipate how the west would respond politically, militarily and economically — assuming that barely veiled threats of nuclear destruction and European dependence on Russian energy would cow the EU into acquiescence. Russia is likely to be paying the price of Putin's miscalculations for decades to come.

CHINA: Beijing's balancing act

Beijing has managed to maintain a largely arms-length relationship with Russia since the latter's invasion of Ukraine, while increasing Russia's dependence on China as an outlet for energy exports. But Beijing's task of juggling relations with Russia and its far larger trade partners in the west is becoming more difficult.

The "no-limits partnership" between China and Russia — touted by Chinese president Xi Jinping just before Russia's attack on Ukraine — soured western views of China and exacerbated trade and political tensions. The US and EU between them absorb two-thirds of Chinese exports, and exports generated two-thirds of China's GDP growth last year.

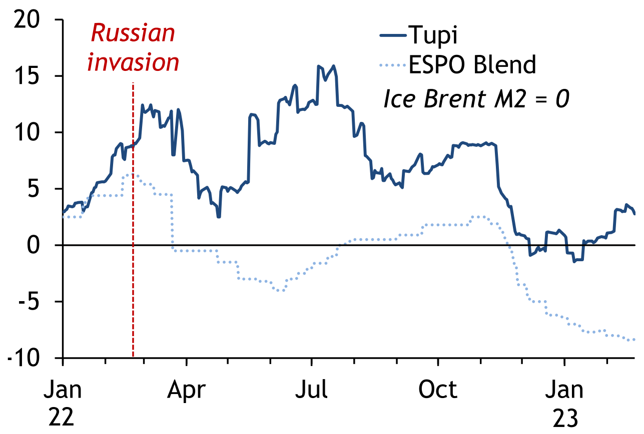
Beijing may have hoped that marshalling resistance to Russia in Europe might distract the US from seeking to counter China's influence in Asia-Pacific, but these hopes have foundered. Washington has ratcheted up economic pressure on China with a ban on the sale of sophisticated semiconductor chips from US producers to Chinese firms. Europe's stance is hardening too. The EU will introduce a foreign subsidies regulation in July, aiming to levy anti-dumping duties on subsidised Chinese imports. Attempts to ratify 2021's EU-China comprehensive agreement on investment have stalled owing to criticism of China's Xinjiang policy.

Peace proposals

Now, relations appear to be souring further. The US is "concerned that China is considering supporting Russia's war effort in Ukraine with lethal assistance", US secretary of state Tony Blinken says. "China's position on the Ukraine issue boils down to supporting talks for peace," Chinese foreign minister Wang Yi said at the Munich Security Conference on 18 February. A peace proposal put forward by Beijing following Wang's visit to Munich and Moscow in February calls for "respecting sovereignty of all countries", but it also calls for an end to sanctions, in a nod to Russia's concerns. Ukraine has expressed interest in Beijing's intervention — if not the actual proposal — as it could become the first serious effort at mediating an end to the war since March 2022.

Shorn of allies, Russia has stepped up its courtship of Beijing — it is talking up a potential visit to Moscow by Xi later this year. Yet limits to the Russia-China partnership do exist. For all its threats to reroute gas supplies from Europe to China, Russia does not yet have the infrastructure to do so. And

Delivered China spot differential *$/bl*



despite the supposed closeness of Xi and Russian president Vladimir Putin, Russia's invasion caught Beijing by surprise. About 6,000 Chinese citizens were left stranded in the war zone as Russian tanks rolled into Ukraine in February last year, forcing China to organise a mass evacuation of its nationals the following month.

For its part, China so far has declined to provide Russia with military aid in the face of sanctions, or even provide economic aid that is not, ultimately, to China's advantage — such as the redenomination of US dollar oil and gas trade into yuan. Setbacks in Ukraine have dealt a possibly fatal blow to Russia's status as a military superpower, allowing the expansion of Chinese influence in central Asia, which formerly looked to Russia for security guarantees.

Prices for Russian crude have tumbled relative to their global peers in recent months. Russian light sweet ESPO Blend crude, which competes with Brazil's medium sweet Tupi in the Chinese market, traded at record discounts to the Brazilian grade in February, as Chinese state-controlled oil companies switched away from Russian grades in December. State-controlled Sinopec resumed purchases of Russian crude in late February. Whether this reflects a view within the company that it will garner political favour from Beijing for doing so as relations with the west worsen, or merely because ESPO Blend is so cheap, remains unclear.

LIKE WHAT YOU'VE READ? HERE'S HOW TO FIND OUT MORE...

This special report draws its content from Argus business intelligence reports, which provide in-depth analysis and forward-looking insights to help decision-makers navigate risk and identify opportunity in oil and gas markets. For more information on how to access these services, which include *Petroleum Argus*, *Argus Global Markets*, *Argus Eurasia Energy*, *Argus China Petroleum* and *Argus Gas Connections*, please contact oil-products@argusmedia.com

For more information:

contact@argusmedia.com +44 20 7780 4200 www.argusmedia.com @argusmedia