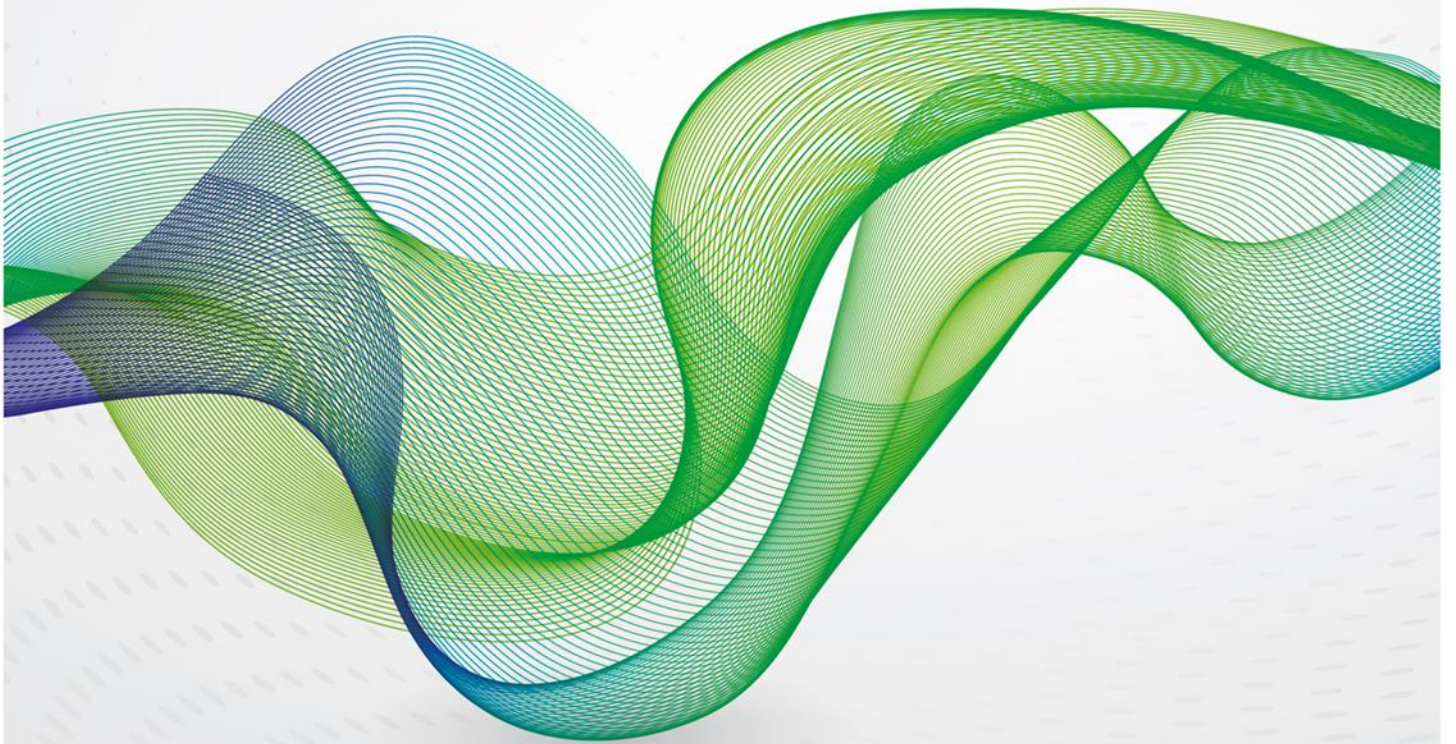


November 2020

China's energy policies in the wake of COVID-19:

Implications for the next Five Year Plan





Following the publication of the [Oxford Energy Forum, China's Energy Policies in the Wake of COVID-19](#), the China Energy Programme held a webinar to discuss the trends in China's energy markets in the wake of COVID-19 and ahead of the upcoming 14th Five-Year Plan (FYP; 2021-2025). This comment summarises the main conclusions of each of the three sessions.

The Chinese economy is recovering strongly from its COVID-19 downturn, with fossil fuels and low international prices helping the recovery in different ways: New coal-fired power plants have been an important means for local governments to generate growth and employment; lower LNG prices alongside a government mandate to reduce city-gate prices have helped industrial activity; and low oil prices—combined with the domestic product pricing mechanism—have offered refiners strong margins. This has not only supported industrial activity in China but has put a floor under global energy prices.

While China is leading the global economic recovery, the rest of the world may not be able to follow suit as rapidly. China's external environment is also looking increasingly challenging with a looming global recession and ongoing tensions with the US. As a result, there is growing urgency to develop the domestic market as a driver of economic activity and innovation as well as to hedge against potential energy supply disruptions and the emerging technological cold war with the US. Thus far, this has led to a renewed focus on coal and efforts to build up crude oil reserves, but also to an emphasis on demand-side management and electrification.

The recovery package has also meant an even stronger role for the State in the economy in many sectors. Even though market reform remains a priority, it will continue to go hand in hand with State guidance. While markets are seen as a means of delivering economic efficiencies and improving capital discipline, this is not the main objective of reforms. Power market reform, gas unbundling and oil market liberalisation, as discussed below, are pursued with a number of objectives in mind including enabling stable economic growth by ensuring reliable supplies, reducing the cost of energy, greening the energy system, improving industrial competitiveness and finding a new balance of powers between state-owned incumbents and private companies. To be sure, there is a certain degree of tension between some of these goals: new coal-fired power plants are not conducive to Xi Jinping's carbon neutrality pledge, but they help short term growth and energy security. Meanwhile, liberalisation in oil and gas, which has led to increased imports of crude and LNG seem at odds with efforts to limit import dependency; private refiners are weakening the state-owned majors, who are still saddled with social responsibilities, but in gas markets, emerging players must work closely with the majors even as midstream reforms seeks to give them a growing share of the market. In the power sector, state-owned companies are increasing their ownership of renewable energy.

These developments matter, because China's policy choices have ripple effects well beyond its borders. Changes to crude and oil product trading will impact China's choice of crude suppliers but also reshape the global refining industry. Meanwhile technological developments in mobility, batteries and storage technologies shape cost curves, potentially accelerating the global energy transition. China's unilateral commitment to ambitious climate targets can generate renewed momentum globally, but how they are translated into domestic policies and whether natural gas has a role to play in the transition will matter greatly.

These questions and others were discussed during a very rich day, comprised of three sessions, on power sector reform; natural gas market liberalisation and China's evolving role in global oil markets.

1. China's power sector ambitions: One step forward, two steps back?

The Chinese state continues to play an outsized role in markets in general, and in the power sector in particular. State-owned companies and local officials retain substantial influence in the decision making process on new capacity additions, power dispatch and pricing. There is little to suggest that this will slow or reverse any time soon, and in the wake of COVID-19, despite renewables reaching grid parity in many parts of China, coal capacity additions are increasing.

So what is the role of the market in China's power sector? It may be best described as a means of delivering effective outcomes—under the State's guidance—rather than a way of achieving economic



efficiencies. Which in turn raises the question, what are the goals of power sector reform? They are numerous and in the near term, include ensuring reliable energy supplies at affordable costs with a view to supporting economic recovery. In this respect, coal is as much a power source as it is an employer and generator of economic activity. Yet the goals also vary among provinces and depend on the resource endowment and local-level interests. The extent to which power sector reform also aims to encourage cleaner energy options is an open question, but since Xi Jinping's carbon neutrality pledge, it is increasingly likely to be a significant part of the equation.

Will Xi Jinping's pledge be reflected in the 14th FYP? While the pledge is the start, rather than the outcome of a discussion among industries and bureaucracies within China, it is likely to shape some of the targets: A more ambitious renewables target is likely, but it remains unclear if it can dramatically slow the growth in fossil fuels in the near term.

China's coal rush is driven by short term economic needs...

Coal has been making a comeback in China with 48 GW of new plants planned this year alone. In addition, provinces are earmarking funding for fossil-fuel heavy projects such as coal-to-chemicals, coal in power and heat, among others, as part of the post COVID-19 economic recovery. The appeal of coal lies in a number of factors: First, the government's focus on maximizing energy self-sufficiency is bolstering fossil fuels more broadly, and coal in particular given that most of the supplies are domestic (compared to oil and gas that are imported). Second, following the COVID-19 economic shock, with smaller companies struggling financially and the Chinese central government looking to state-owned companies to support the economic recovery, new coal fired capacity additions have been a go-to option. This is particularly the case for local governments seeking to boost employment and to keep existing companies and large industries solvent, leading them to direct financing from locally-owned banks to new fossil fuel projects. Despite the softer economic outlook—suggesting lower electricity demand—and increasing cost competitiveness for renewables, local government continue to push forward with fossil fuel intensive projects. Indeed, given that there are relatively few big-ticket 'green' projects, the Chinese government—like others around the world—are finding that large scale investment projects tend to be in fossil fuels.

This also has implications for renewable capacity additions, which were already expected to slow pre-COVID-19. There has been a shift from the 'almost euphoric' growth levels seen over the past decade to a more constrained growth outlook. In part, the rate of renewable capacity additions became part of the problem, given the challenges of their integration in power generation. Slower additions should allow for increased connections (and less curtailment) but local governments still look at renewables as a fuel for new demand while coal provides stability and reliability in existing demand.

Moreover, dispatch rules still tend to favour coal over renewables. With very limited spot trading determining pricing, long term contracts remain the norm. Local officials have a say (directly or indirectly) in drafting and negotiating power supply contracts and in the reference prices used. At times this favours locally generated power sources, mainly coal.

...will it be tempered by President Xi's carbon neutrality pledge?

Chinese president Xi Jinping's announcement on 22 September, that the country would aim to have CO₂ emissions peak before 2030 and achieve carbon neutrality before 2060, is at odds with the trends observed in the power sector. As such, it came as a surprise to observers and, probably also to many within the Chinese bureaucracy.

While these pledges were underpinned by a number of feasibility studies conducted within China—suggesting that the Chinese leadership believe it to be achievable—the timing of the announcement was likely geopolitically motivated, related to the US presidential elections and potentially an effort to shore up China's global image. Still, Xi's announcement is now kick-starting a new planning process domestically to align with these goals. From an international perspective too, the announcement is significant in a number of ways: First, it is a unilateral move—-independent of EU or US pledges, though it may have been raised already with the EU in a summit the week prior to the UN General Assembly—



and could now generate new momentum globally. Even though Xi's statement said that China will 'strive to reach' peak emissions and carbon neutrality, it still remains a strong signal to markets globally.

It is still unclear to what extent these pledges will be reflected in the upcoming 14th Five Year Plan. Local officials and government bureaucracies will now start translating the goals to policies, coming up with their own peak emissions targets and potentially slowing some of the planned coal-fired power plant additions, but there may be scope for additional growth in fossil fuels over the next decade.

Xi's announcement is also significant in that it might reduce the mixed messaging that has emerged recently, as policy fragmentation has likely facilitated the increased support for polluting industries. The National Development and Reform Commission (NDRC) is responsible for drafting the energy FYP and for energy policy making more broadly, while climate change sits with the Ministry of Ecology and Environment (MEE). It is also the NDRC that has been downgrading the risk of coal overcapacity in a large number of provinces since early 2020—perhaps taking its cues from the renewed attention to energy security in China—paving the way for approvals of new coal-fired capacity even though utilisation rates have been falling and losses in the coal companies are mounting. The MEE's most powerful policy tool is environmental impact assessments and in recent years, enforcement has been strongest when implemented in tandem with other Party organs such as the anti-graft watchdog.

Much like the Xi-Obama joint climate pledge in 2014, that led to a drop in emissions and coal consumption—before stronger economic activity led to a reversal in these trends—this latest commitment will likely generate momentum domestically. But how soon will we see change and how lasting will its impact be? Adding 2,000-3,000 GW of renewable energy over the next several decades is likely manageable for China, but exiting fossil fuels is harder. Bureaucracies and local officials will need to reconcile economic growth, energy security, environmental protection and decarbonisation.

While it is clear that coal-fired power plant additions are set to slow, the timeframe remains unclear. At the same time, the climate pledge seems likely to have a limited impact on oil demand, given that oil consumption was set to peak in the 2030s and policies were pointing to this even before the new commitments were announced. But will the carbon neutrality pledge boost gas demand in the near term? This remains an open question. On one hand, as 660 GW of coal fired capacity will be retired between 2035-2045, there will be more room for gas in peak shaving, especially given that China's energy demand will continue to grow and renewables and nuclear alone will not be able to meet the needs from retired coal-fired capacity while also catering to new growth. But given that higher gas use will also lead to rising import dependency, there is still some reluctance to significantly increase the share of gas in power. Moreover, for coastal provinces with access to imported LNG and offshore wind, the latter may be more appealing. Still, until 2040-2045, gas use is set to grow and play a role in China's energy transition.

Finally, technological innovation is set to receive a boost. Beijing is looking to develop technologies to enable distributed generation and demand management as these could provide an opportunity for China to capture new markets and supply chains of technologies and services.

What is the goal of power sector reform, if the State remains deeply involved in the market?

Whether by 2040 or 2060, the share of renewables in power generation is set to surge. But will this transition be managed by the State, the market, or a combination of both?

With China offering a clearer timing for its climate ambitions and efforts to phase out coal, it remains to be seen whether it will use the instruments adopted in the EU, including a price for carbon, efforts to develop technologies such as CCUS and others which are necessary to maintain coal if it continues to run, alongside wider thinking about a just transition plan. In Europe, industry has seen significant changes due to the penetration of renewables, including decentralisation and digitisation which are aimed to deliver greater flexibility. European power markets are now designed to support short term flexibility, giving daily and hourly signals to deal with local intermittency in real time. Yet there are no mechanisms to deal with long term intermittency and prospects of weeks or months without hydro. For

now, given that technologies such as hydrogen, biomass and biogas are not developed enough, markets play a role in short term allocation while government decisions and policies still need to respond to long term security of supply and intermittency questions.

China is currently in the process of establishing short term power markets, but progress to date has been tentative. The latest round of reforms date back to 2015, with eight spot trading pilots currently active, but an estimated 90% of power generation is still priced through medium or long-term contracts, based on coal-fired benchmark prices. Even the simulated trading on spot markets such as Guangdong have been trading below the marginal fuel cost so do not incentivise flexibility or cross provincial power trading. In the next FYP, spot trading is set to continue with additional pilots starting up and market-based pricing mechanisms set to account for a greater share of contracts. In addition, ownership reforms aim to limit the role of the State Grid, thereby allowing for the formation of a market-based price signal that should support the integration of renewables. While there is also much discussion about capacity markets in China, it remains unclear to what extent they will enable cleaner sources or will actually facilitate coal.

But even as these develop, China's renewable markets are likely to remain guided by the state. Even with some simulated trading, most renewable energy comes under auction mechanisms or grid parity, which are long term mechanisms. That said, there is less risk than in Europe that higher renewable energy penetration levels will limit investment signals in wholesale markets. This is because increasingly renewable energy plants are state-owned and so if there are strong enough policy signals, or if other investment avenues close off, renewables will become a more appealing investment.

The Chinese government continues to emphasise the importance of power market reform and of spot trading, but it remains likely that the long-term development of markets will still be guided by the government, even though this may be economically inefficient. In Europe there is a growing recognition that wholesale market design needs to be perfected as distributed generation (including resources such as batteries and smart devices) becomes an increasingly important resource to provide the flexibility needed for decarbonising electricity as well as for replacing fossil fuels in transport and heating in order to provide more efficient price signals. In addition, the growth in demand-focused participation in spot markets (energy and ancillary services) has also led to a change in the nature of industry, which is no longer top down, and threatens existing players.

For now, the Chinese system seems ill suited to pursue a European path. That does not mean that there will be no change in the power sector or that reforms will stall, but it is probably unrealistic to expect that markets will be the most decisive factor in shaping outcomes as the Chinese central government will want to maintain control and ensure the effective implementation of its goals over economic efficiency.

If so, then what are the goals of power sector reform? They are numerous and include ensuring reliable supplies at affordable costs, dispatched at greater levels of economic efficiency, in order to sustain economic activity and in some cases, to support it. Yet the goals also vary among provinces and depend on the resource endowment and local-level interests. The extent to which power sector reform also aims to encourage cleaner energy options is an open question, but since Xi Jinping's pledge it is increasingly likely to be a significant part of the equation

2. Natural gas market liberalisation

Whether China's carbon neutrality pledge is positive for natural gas demand beyond 2040 is an open question, but the shorter term outlook for gas is looking bright, supported by the ongoing unbundling process and low LNG prices. There are more questions than answers currently about the midstream company, PipeChina, but over the course of the 14th FYP, as the regulatory framework is fine-tuned, PipeChina will likely help improve efficiencies, bringing more gas to market through wider participation. Already in 2020, more Chinese buyers have had access to cheaper LNG, increasing the share of LNG at the expense of pipeline flows.

Going forward, while LNG demand is expected to remain strong, it could be tempered by Central Asian pipeline imports as prices, which lag oil prices by 9-12 months, are likely to fall in early 2021. At the same time, a cold winter and LNG shut ins globally could tighten the market. And concerns about import dependency could also curb China's strong appetite for additional LNG. Liberalisation will remain a key theme in the 14th FYP, but the focus on domestic supplies will also loom large in the next plan, as supply security remains high on the agenda.

The creation of PipeChina also raises questions about the role and power of the state-owned majors in the domestic market as they are tasked with ensuring supply security. There are concerns that by virtue of their weight and incumbency they will remain dominant, especially as prospects of an independent regulator seem dim. At the same time, the state owned majors need to reinvent themselves in light of the growing competition: Can they focus on the upstream and will that yield revenues and/or political benefits? How do they position themselves in the downstream? For now, synergies are emerging between the majors and the new entrants.

The abundance of LNG supplies at lower cost has helped demand. But going forward, what are the drivers of gas demand? Ongoing increases in residential and transport use will continue to underpin new gas demand while coal-to-gas switching in industry will be possible when prices are low and supplies ample. The scale of demand growth in the power sector is therefore the key variable to watch as China phases out coal and ramps up its renewable capacity.

PipeChina is a boon for the gas market, and for LNG

The creation of China's midstream company (PipeChina) is an important step toward gas market reforms as it is set to improve third party access. On 30 September 2020, the asset transfers from the state-owned majors to PipeChina were completed, marking a separation between asset ownership and trading activities. To be sure, the coming years will be critical in terms of policy and regulatory design, with the government likely to establish virtual trading hubs in a number of provinces, guidelines for shippers, and determine the capacity allocation and balancing rules among others. In designing the regulatory framework, the government will need to address a number of questions and concerns, mainly that PipeChina will prioritise the incumbent state-owned companies at the expense of both foreign and private companies.

While concerns were raised about a repeat of the experience seen in the power sector, where unbundling has only strengthened the Grid's position, that experience may not be relevant for gas market unbundling: One key difference is that the Grid trades electricity and distributes power to end users while PipeChina will not be permitted to trade gas. China will draw on its own experience and international models as it seeks the best design for its emerging market. But even though international lessons point to the importance of an independent regulator, there are currently no plans to establish a new regulatory agency and the oversight will largely fall to the National Energy Administration's local branches. The central government remains wary of adding bureaucracies and will wait to see how PipeChina and the market dynamics evolve.

Lower prices, more supplies

While the details will take time to iron out, the creation of PipeChina combined with low spot LNG prices is set to spur gas use in China and already, combined with low LNG prices, has supported imports. Historically, Five Year Plans that have focused on demand-side targets (such as the 12th FYP, 2011-2015) have failed, prompting decision makers to focus on supply security and reducing costs as a means of spurring demand in the 13th FYP (2016-2020). The focus on liberalisation in the upcoming plan will allow more supplies to reach the market—as more importers are able to access midstream infrastructure—and more end-users to negotiate directly with suppliers. Over time then, midstream reform will lead to efficiency gains in the system. For example, PipeChina could re-direct pipeline flows with Central Asian supplies ending up in Central and Western China, rather than along the coast, where



they are less competitive than LNG, at current prices. These efficiencies, in turn, are expected to bring down prices.

This process has been helped by lower prices of both imported and domestic gas. Already earlier this year, as part of its efforts to restart economic activity, the central government instructed the majors to reduce their selling prices, while provincial governments have started experimenting with direct sales to end users just as gas distributors are increasingly gaining access to import markets. Low spot LNG prices have supported buying activity by new entrants. The 14th FYP is likely to continue with gradual price deregulation as provincial authorities with 'competitive' markets will be allowed to experiment with prices.

A fine (supply) balance

Spot prices have been appealing to new entrants, leading to an increase in spot vs term cargoes in Q2 20. But this has also put pressure on the state-owned majors' oil-indexed term LNG imports. Even though prices have fallen, as they tend to lag movements in oil prices by around 3 months, they have not reached spot LNG levels. But pipeline imports from Central Asia have been the least competitive this year with COVID-19 partly constraining flows, but mainly because the delivered cost at the coast remains higher than both spot and term LNG. Central Asian pipelines tend to lag movements in oil prices by as much as 12 months and have a higher fixed price (even though they have a lower slope to oil), in order to cover the cost of the midstream in the exporting country. In addition, Central Asian gas incurs an additional \$3-\$4 per MMBtu in transport from the Western border to consumer provinces. That said, the contracted 40 bcm from Turkmenistan also includes 10 bcm of flex capacity, negotiated on a yearly basis.

What does this mean for prices going forward? The difference between spot and term LNG contracts is likely to narrow over time, as more spot cargoes enter the market, but buyers do not seem to be assuming that prices will remain lower for longer. A cold winter which would spur demand, alongside changes in the volumes available for spot trade—especially if low oil prices weigh on US production—could alter the supply-demand balance, impacting prices in the near term. Going forward, Chinese buyers remain concerned about energy security and will continue to focus on domestic supplies as well as pipelines, especially since rapid LNG demand growth, combined with COVID-related delays to FIDs this year, could tighten the market again in 2024-2025. Chinese buyers will therefore want to ensure as much flexibility as possible in their supplies. To a certain degree, they already have some wiggle room both in their pipeline and term contracts. With discussions about the Power of Siberia 2 and the Central Asian Line D still ongoing, it looks increasingly clear that only one is needed, but unclear which will go ahead first.

The majors and the new entrants

The changing price dynamics and the creation of PipeChina have led to changes within the industry too. The majors have been accelerating new regas terminal additions but are also working with the new entrants and local distributors to develop local infrastructure (which is not yet under PipeChina's remit). Overall, the collaboration between new entrants and the majors should offer emerging players greater access to supplies and to the market. To date, the emerging players have been gaining approvals to build additional import terminals, but they should now find new opportunities to access existing infrastructure through the exchanges.

The issue of access will be critical for new entrants and will still require collaboration with local governments and the state-owned majors as this will facilitate access to capital and to local distribution networks (which are still more cost effective than trucking). As PipeChina changes these dynamics, there will be greater absorption of spot cargoes, eliminating the difference with term cargoes but to begin with, PipeChina seems to be enabling third party access, albeit with the majors still looming large.

3. China's evolving role in global oil markets

China's oil demand seems to have emerged unscathed from the COVID-19 demand shock, bouncing back in Q2 20 along with the economic recovery. Moreover, the fall in global oil prices led to an import binge that has put a floor under global prices and further highlighted China's importance for global markets.

China derives its pricing power from a number of sources, some unbeknown even to the government: the sheer volume of the country's crude purchases, the state-owned majors' dominance in benchmarks and the growing importance of independent refiners for a number of crudes. Yet despite price discovery gradually moving East, China's crude contract on the Shanghai International Energy Exchange (INE) is not (yet) a source of pricing power. Further liberalisation of China's own oil market is seen as a precondition to the INE becoming a regional or international benchmark. And while this is a priority for the next Five Year Plan, lifting all restrictions on crude and product trading will have unintended (and negative) consequences for both domestic and international refining margins. The Chinese government, despite pledges to further deregulate the market, will move slowly in that direction. Currency convertibility would also help the Chinese currency become a more palatable option for international commodity trading, potentially at the expense of the US dollar, but for now, traders and producers remain reluctant to move away from the dollar.

While China remains a huge market for crude for many Gulf producers, it poses a considerable challenge in the downstream: Even though China's oil demand is expected to continue growing for another decade or so, large refining capacity additions amidst weaker demand growth mean higher exports of oil and petrochemical products. Yet lower oil prices are unlikely to change China's march toward electrification, as this is increasingly seen as a way of tackling energy insecurity. Lower oil prices may, however, require a change in policy support such as bans on internal combustion engines as subsidies become too onerous. Nonetheless, questions of affordability, battery size and reliability could weigh on the industry even as the government focuses on infrastructure and deploying new technologies.

COVID-19 has been good for independents

Unlike in gas markets, where new entrants account for a fraction of imports and supplies and where they must work with the majors to survive, in oil markets, the state-owned companies are on the back foot. The Shandong independents, despite being unloved by the central government, have survived and thrived in part thanks to support from the local government. They are also highly adaptable and nimble and have been more responsive than their state-owned peers to refining economics. The state-owned companies need to follow central-government planning and are saddled with social responsibilities, leaving the individual refineries within the system limited leeway in their operations as their plans are defined by the headquarters, in coordination with the central government. Over the course of 2020, they have had to cut runs even as the independents raised throughputs. Sinopec in particular has suffered from the pandemic-related demand shock, as its refineries are located in Central China, the epicentre of the outbreak, and then had to curtail output due to heavy flooding along the Yangtze river, also a Sinopec stronghold. Finally, the new mega-refiner Rongsheng competes with Sinopec in the South (Zhejiang province) while Hengli threatens PetroChina's product supplies in North Eastern Liaoning province.

Short term recovery and long term security

The independent refiners have been instrumental in the strong rise in China's oil imports. But while the economy has shown signs of strength since May, panellists voiced concerns that it may be running out of steam. A substantial boost to the economy and oil demand this year and next may require more stimulus, focusing on domestic consumption, as the global economy is unlikely to be a source of support.

The recognition that China must reduce its dependence on the export economy and rely on domestic consumption to drive growth has been emphasised recently by the government, but this priority already dates back to 2007. Today, however, there is greater urgency to focus on the domestic economy

because of fears that the middle income trap is rapidly approaching and due to the emerging technological cold war with the US and its international partners.

This also suggests that electrification remains an important policy goal as it is at the interplay between the desire to move up the technological value chain and rely on energy sources that are less vulnerable to the US or other hostile parties. That said, oil import dependency is only one element of the energy security debate with one school of thought in China focusing on the vulnerability of physical supplies, with another looking at energy security more broadly, taking into account environmental sustainability and local pollution. Both the need to limit dependence on imports as well as clean air targets point toward the need for improved demand-side management and a faster shift toward non fossil fuels. And given that peak oil demand is expected over the next decade or so, import dependency may be a smaller concern going forward.

China's oil demand set to plateau in the 2030s

For the next decade or so, though, China's oil demand is still expected to grow. Consumption is expected to plateau in the 2030s with some scenarios pointing to an earlier peak, but the timeline is unrelated to Xi Jinping's recent carbon neutrality pledge as the electrification of the transport sector was in the cards well before the announcement. Even though gasoline demand growth will slow as more electric vehicles are added, demand for petrochemicals as well as air travel and freight point to growth through the 2030s, albeit at a slower pace than current growth.

Mobility trends will impact the growth outlook, and whether oil demand peaks around the 2030s (and potentially before) or in the mid-2030s and in this context, government support for electric vehicles remains a key factor. Despite slower electric vehicle (EV) deployment around the world as governments face growing financial constraints and low oil prices disincentive the switch away from internal combustion engine (ICE) vehicles, EV sales in China are rising strongly. Nonetheless, questions of affordability, battery size and reliability could weigh on the industry even as the government focuses on infrastructure and deploying new technologies. The next step for the government may be to ban ICE vehicles, as subsidies will no longer be a viable solution, but different policy frameworks are likely to emerge in different localities. On the national level, EV infrastructure and innovation in smart vehicles will likely figure prominently in the next Five Year Plan.

Liberalisation is a mixed blessing

The FYP is also likely encourage additional changes to the domestic pricing mechanism and promote further market liberalisation. While these are unlikely to alter the outlook for oil demand, they could prove transformative for trade flows and refining margins. In the next FYP, the government will push forward with state-owned enterprise reform and the focus on 'mixed ownership' (which entails some private ownership of SOEs) in a bid to increase price consciousness and efficiency in the large state-owned companies. It does not necessarily mean a smaller role for the state, but the government does want the majors to become more efficient and be less dependent on government subsidies, while also helping private companies grow.

But will the government abolish or modify the domestic product pricing mechanism and open crude and products trade up? Allowing buyers to take advantage of low crude prices and import has helped refining margins this year and allowed China to fill up its petroleum reserves, but there is still a concern that freeing up product trade could lead to higher imports of products and disincentivise product exports, as they may not be cost competitive.

Viewed from the outside, the biggest risk associated with the liberalisation of China's product market is a rise in oil product and petrochemical exports, and as China's refiners add integrated chemicals capacity. For Middle Eastern producers, whose strategies have been to integrate across the supply chain in order to serve the Asian market, China's rise as a producer and exporter of products and petrochemicals poses new challenges, as they will be competing with their biggest client in the downstream. Similarly, their efforts to participate in the Chinese downstream have faced delays and



obstacles. Finally, competition to serve the Chinese crude market continues to intensify between OPEC members and non-OPEC producers, thereby further increasing China's pricing power.

China's pricing power in oil markets: prelude to de-dollarization?

China's pricing power has increased in the wake of the demand shock, although the state-owned traders have long been influential actors on Middle Eastern benchmarks. At the same time, progress on liberalisation and market reform is seen as necessary prerequisite for China's crude contract (the Shanghai International Exchange, INE) if it is to become a regional or global benchmark. Moreover, moving the domestic product pricing mechanism away from the government formula (based on Brent, WTI and DME) and basing it on the INE would allow the majors and the independents to hedge on that market. The INE could also become more widely used by the independents as a clearing mechanisms, allaying some of their credit issues.

In the interim, even though the INE is only likely to develop gradually, China's pricing power continues to grow. The independents' innovative crude purchase pricing systems have allowed them to develop a vibrant spot market in Shandong, to the point that they now send a pricing signal for a certain number of crudes that they frequently buy. It is the state-owned majors, however, that have established themselves as an influential force on key benchmarks. Over the years, in their efforts to diversify import sources as a means of ensuring supply security, the state-owned traders have increased their pricing power on a number of benchmarks, driving new benchmarks outside of Asia. As imports from the US increase, for example, Murban could become an important benchmark for Asian refineries and Middle Eastern producers to compare the value of lighter crudes. In these price formation processes, China's traders could exert their influence, even as the Chinese government seeks to promote the INE and is not necessarily aware of its traders' global influence.

Yet even as China's pricing power continues to increase, the prospects for a move away from the US dollar and toward more trading in RMB seems unlikely. Even though price discovery is moving to Asia, and the INE is encouraging trade in the RMB, Gulf producers remain reluctant to move away from the highly liquid benchmarks in the Middle East and more firmly to Asia, where the INE's shortcomings remain a deterrent. Moreover, Gulf economies rely heavily on the US dollar and would therefore be reluctant to shift trading away from it. In addition, international traders remain reluctant to trade more actively in the RMB as long as it is not fully convertible. That said, as the US has become reliant on financial sanctions and counterparty risks, concerns about the US over-weaponising the currency are leading China, and potentially others, to look for alternatives to it. The RMB is not yet a viable alternative.