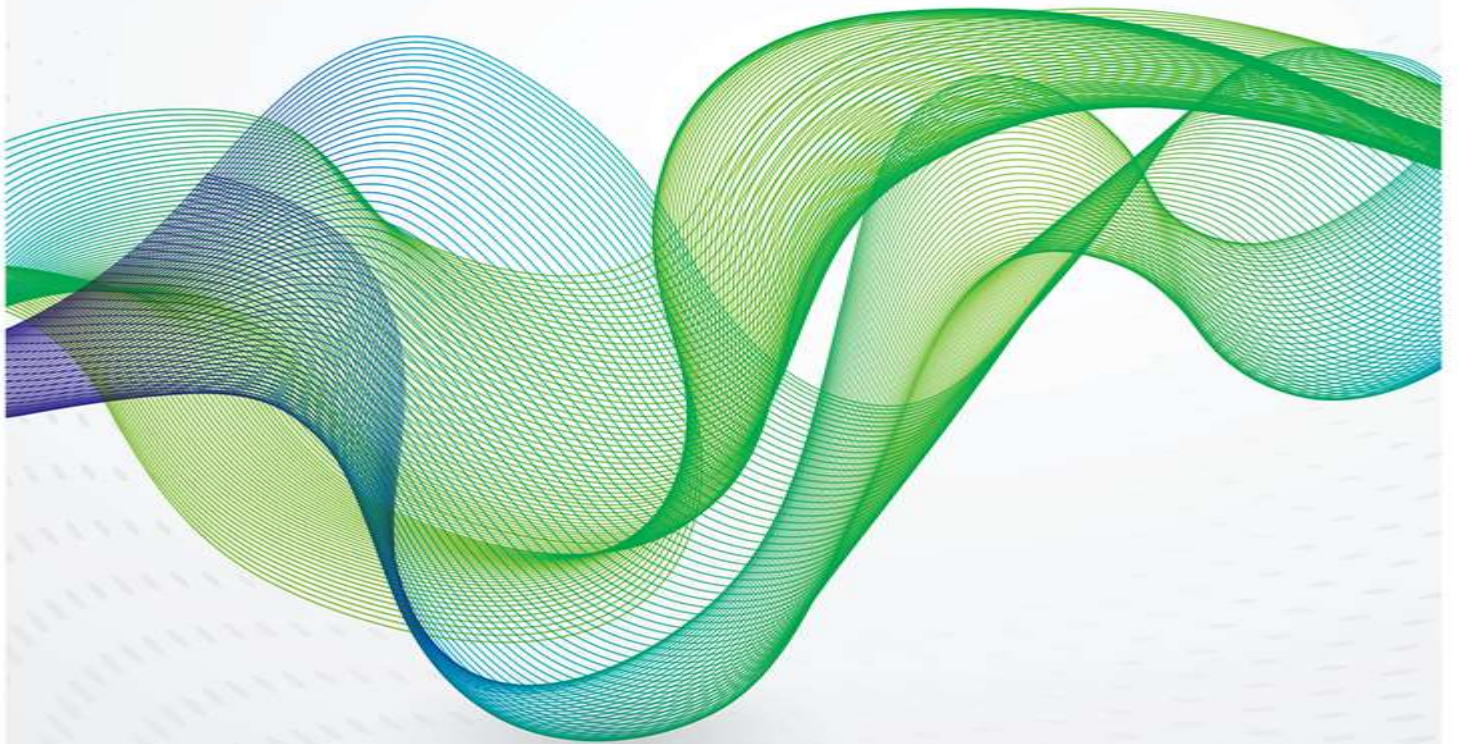




THE OXFORD  
INSTITUTE  
FOR ENERGY  
STUDIES

March 2020

# China Day 2020 summary: Geopolitical shifts and China's energy policy priorities





At the end of February, the China Energy Research Programme at the Oxford Institute for Energy Studies (OIES) hosted its first 'China Day', bringing together programme sponsors alongside a number of experts to discuss some of the key trends in China and their implications for energy policies and markets. At the outset, discussions during the day were to revolve around the policy priorities for the final year of the 13th Five Year plan and drafting for the next plan, including questions such as environmental policies, reform and liberalisation, and to what extent US-China trade tensions would alter these priorities. The outbreak of COVID-19 changed both attendance and the focus of the day, as markets grapple with the uncertainty surrounding the global response to COVID-19. Despite this, discussions covered both the short-term challenges associated with COVID-19 and the medium-term policy priorities for China's energy policy and markets.

Undoubtedly, Beijing's efforts to contain the spread of the virus is set to take a massive toll on the economy and on energy demand in Q1 20, weighing on global supply chains and growth. As the virus spreads globally, China's ability to lead a V-shaped recovery is increasingly uncertain. It remains unclear whether Beijing is committed to reaching a GDP growth target of 5.6–6 per cent this year, and if it is, whether an infrastructure-heavy stimulus can have the intended effect. What is clear, though, is that already the focus on COVID-19 has slowed progress on other policy priorities including environmental policies and liberalisation, and a strong fossil-fuel heavy stimulus would further delay them. A targeted stimulus through the state-owned economy would also complicate future negotiations between the US and China on the structural issues that were left out of the 'phase one' deal. The latter is also marred with uncertainty as markets struggle to see how trade flows can adjust to meet the lofty buying targets set out in the deal, and question whether they actually need to look at the details of what, in essence, is a political deal. If enforcement will be judged by politicians based on their electoral needs, do the numbers really matter?

At the same time, the need to tackle COVID-19 and reinvigorate the economy could reinforce the role of the state in the economy, delaying an already protracted liberalisation process. While in the gas market such delays could end up benefitting the incumbent state-owned majors, in the oil market their role continues to be challenged by both the Shandong independents and the new mega-refineries. The long-awaited consolidation in the oil downstream may not happen this year, but if it does, the Shandong teapots may not be the first to go.

While the richness of the day's discussions cannot be captured in a few pages, below some of the key points raised in the discussion are covered.

## 1. The elusive V-shaped recovery

At the beginning of this year, China's economic prospects were looking up due to the 'phase one' deal and last year's stimulus efforts starting to filter through to the real economy. But the response to the outbreak of COVID-19 has weighed heavily on global supply chains, domestic, industrial, and consumer activity, as well as to a dramatic decline in tourism. As COVID-19 spreads beyond China's borders, the economic impact remains hard to quantify given that the situation is still unfolding and that governments responses differ.

What is clear, however, is that weaker demand within China has already reverberated through global markets; supply chains have been disrupted—although scale and timeframe remain unclear given that reliance on even a small component that is made in China could derail entire chains—and as a result there is the possibility of severe disruptions in a diverse range of industries. Increasingly, COVID-19 is also weighing on confidence in financial markets.

Within China, quarantines and travel restrictions have led to a sharp economic deceleration with the official purchasing manufacturing index falling to a record low of 35.7 in February, from 50.0 in January. Car sales fell y/y by 80 per cent in February. This has also led to a drop in electricity demand and industrial output, reduced coal use at power stations; and refinery runs—with over 3 mb/d of throughputs down in February—falling to their lowest level since 2015. Oil product demand has been cut by more



than half—with CNPC’s research institute estimating lost gasoline and jet demand at 2.2 mb/d (combined), with diesel accounting for an additional 0.8 mb/d. Natural gas demand has likely fallen by as much as 10 bcm in Q1 20. At the same time, NO<sub>2</sub> levels are more than a third lower than 2019 levels.

Now that the outbreak is looking increasingly contained in China, the government’s focus is turning to reinvigorating the economy. The imperative to do so stems from the government’s goal of doubling 2010 per capita GDP levels by 2020, but will this remain the paramount goal for 2020? The longer quarantines and lockdowns continue, the harder it will be for Beijing to reach its 5.6–6% GDP growth target for the year (even if the numbers may ultimately show it has been reached). Indeed, CNPC’s research institute, ETRI, still expects China’s GDP growth to reach 5.6 per cent this year, after falling to around 4.5 per cent y/y in Q1 20. Many other forecasters have revised their Q1 20 GDP forecasts for China down. Oxford Economics, for example, estimates Q1 20 GDP to be lower than 2.5 per cent y/y. Moreover, as other countries start to grapple with the spread of COVID-19, China’s own recovery could be marred by a slowdown in partner countries, both suppliers of good and components as well as export markets. Global GDP could contract in Q1 20 as both industrial and consumer activity becomes increasingly constrained globally. With global GDP growth potentially falling y/y in Q1 20, global oil demand may see very soft growth this year, after falling in Q1 20 and could end the year with growth of around 0.40 mb/d y/y. But as COVID-19 spreads, there is additional downside risk to these numbers. China’s gas demand growth is now expected to slow to 5–6 per cent y/y, or around 15–20 bcm with LNG accounting for 6–8 bcm.

These assessments take a relatively dim view of the recovery, despite initial signs of a strong policy boost in China. The V-shaped recovery, which seems to have been widely anticipated by markets, is complicated by both domestic and global factors. Within China, signs of a return to normality are mixed, with some provinces only gradually lifting restrictions even though they are deemed to be lower risks areas as concerns about a second wave of infections is limiting the speed of recovery. Migrant workers are also only gradually returning to their places of work and offices are starting to rotate employee presence to limit contagion and protect their work force. As a result, an estimated 55 per cent of Chinese small- and medium-sized companies had not resumed work as of 2 March 2020.

Going forward, if the government prioritises its GDP growth target for the year, then its most likely response will be an infrastructure- and therefore commodity-heavy stimulus, but, there are fewer infrastructure projects to build than for example after the global financial crisis (GFC) in 2008–2009, and given the structural changes to the economy, consumption has become an equally important driver of growth. In terms of infrastructure, regional integration projects and the real estate sector are set to remain focal areas, benefitting the state-owned economy rather than private companies. In late February and early March, provincial governments pledged up to 34 trillion RMB (\$4.9 trillion) in infrastructure projects, but many of these plans include projects that are already in the pipeline and span several years. Moreover, it remains unclear where the funding will come from, as the Chinese central bank did not cut rates in line with the US Federal Reserve in early March, suggesting some caution in terms of monetary policy as decision makers worry that this will bolster sentiment but not the real economy. That said, the support measures are still expected to provide a policy boost of 1–2 percent of GDP, suggesting a rebound in H2 20.

When considering the government’s policy agenda—which includes tackling COVID-19 and supporting growth; dealing with the trade war (see below); pursuing the government’s anti-corruption agenda and other political issues; promoting the Belt and Road initiative; poverty alleviation and promoting an ecological civilisation, unsurprisingly, tackling COVID-19 and re-boosting the economy are now key priorities, even at the expense of Beijing’s environmental policy and other reform pledges. Deleveraging, which has been a key government priority over the past few years, may also take a back seat in 2020 given that China can socialise and absorb debt more easily than the US and EU could before the global financial crisis. There is still, however, a certain level of discomfort around that as the messaging from the People’s Bank of China continues to highlight.

In addition, the drafting process for the 14 Five Year Plan (FYP) which is set to start this year (as the FYP spans 2021–2025) could also be delayed. Still, this does not change the longer-term priorities of building an ecological civilisation. Beijing recognises that tackling climate change is in its self-interest as it looks to protect vulnerable parts of the population from the impacts of climate change and air pollution and as it seeks technological and innovation leadership, but in the near-term, growth is likely to be the top priority.

## 2. Decouple or de-globalise? The implications of a more competitive US-China relationship

Discussions about the impact of COVID-19 on supply chains and on globalisation more broadly are reinforcing concerns about the implications of US-China ‘decoupling’.

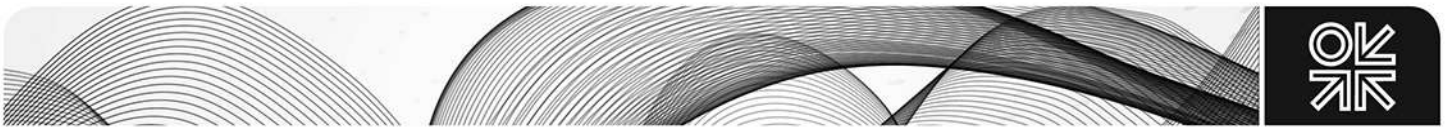
In the longer-term, COVID-19 could lead to a deeper reconfiguration of supply chains as manufacturers look to mitigate a perceived over-reliance on Chinese manufacturing, especially if delays persist due to supply chain disruptions from China, or, China is not perceived as having generated a strong enough recovery in H2 20. It remains questionable whether it is possible to move away from China given its economies of scale and well-developed logistics. Yet such efforts to relocate away from China are not new as costs in the country (including land, labour, and energy) have been rising steadily and the US-China trade war has given additional impetus to such moves. Going forward, however, do manufacturers opt for more fragmented supply chains, producing lower cost components in Southeast Asia and other components in Northeast Asia and Europe/the US, or do they seek to consolidate and repatriate as far as possible, assuming, also, that they are not set up to target the Chinese market?

While numerous factors will inform these decisions, it is already clear that both COVID-19 and the changes in US-China relations are impacting the way businesses and people view globalisation. US policy toward China, under the Trump administration, has been reframed as strategic competition—rather than engagement as it was during the Obama era—and is geared toward winning that competition. While the ‘decoupling’ narrative may not be a stated US policy goal toward China, it could become the unintended consequence of the changing policy focus, leading to bifurcations in sectors such as artificial intelligence and 5G, even if in goods and services, for example, ‘decoupling’ may not be possible.

In this context, it is important to consider the changing role of trade and investment in US-China relations. Historically, it has been a key pillar of bilateral ties but there has been a growing sense of frustration, on both sides, with the trajectory of economic relations. President Trump has made rebalancing the economic relationship with China a key electoral issue and under his administration, economic confrontation has become a priority, as seen in the trade war.

So, is the ‘phase one’ deal, signed in mid-January, enough to bolster the traditional pillars of US-China relations? In the short-term the deal puts a floor under any further deterioration in ties. With both sides seeking to stabilise relations, trade was the most readily available tool to do so and the deal will lead to renewed engagement on economic questions. Even though implementation of the purchase agreements will be challenging (see next theme), the ‘phase one’ deal is probably better seen as a uniquely political exercise. President Trump can caveat the shortcomings and portray the deal as a win if he chooses to do so for his electoral purposes.

But this may not be enough to place ties on a more solid footing in the longer-term. First, the ‘phase one’ has led to a reduction in some duties and a tariff exclusion process, but tariff reduction is not an explicit part of the agreement. As such there is no clear obligation or timeframe for the US and China to lift the remaining tariffs, and as long as these remain in place they will continue to weigh on both economies, and by extension on global activity. In addition, as tariffs make some sectors of the US economy more competitive vis a vis China, they may still be less competitive against European manufacturers, for example, prompting special interest groups to lobby for additional protection. These amount to small and gradual economic losses that lead to closed economies which in turn hinder productivity. Second, a ‘phase two’ deal seems infinitely harder to reach given the structural nature of



the differences, suggesting that the current freeze in tensions will be short-lived. This is especially true if China's stimulus later this year (see above) will benefit the state-sector.

Finally, there has been an ongoing trend toward the "securitisation" of economic relations, meaning that economic challenges are now being regarded as national security challenges. The 'phase one' deal does not stop or slow that. Competition around 5G and US efforts to limit Huawei's role in international 5G networks are the most obvious cases in point. And while much attention is focused on the US and China, the EU is also an important player in the technology sphere, and it too is looking to regulate data and use of artificial intelligence, putting it potentially at odds with China.

The global debate about Huawei's involvement in 5G, however, is emblematic of a deeper debate about China's industrial aspirations as articulated in the "Made in China 2025 (MiC 2025)" programme and the ways in which Beijing seeks to achieve them. In the energy space specifically, the MiC 2025's focus on new energy technologies has helped reduce the cost of renewables globally, but has also led Beijing to seek control of critical inputs into these sectors, which could become an area of increased competition with the US. More broadly, however, the US and China are now competing to dominate the foundational technologies critical to future innovation, including semiconductors, super-computers, autonomous vehicles, and biotechnology among others.

The securitisation of economic relations also reveals a deepening mistrust, and fundamental differences, between the US and China regarding statecraft and global influence. The authoritarian drift in China under Xi Jinping, especially in contrast to US expectations that China would liberalise, is exacerbating the mistrust and fuelling competition for the values underpinning global governance. China's Belt and Road Initiative (BRI) is another case in point as this signature policy for Xi Jinping, and an important outlet for Chinese spare capacity, is now increasingly scrutinised by the US where projects are seen as leveraging economic statecraft to gain a military presence and expand diplomatic influence. Finally, competition is also set to intensify further around the South China Sea where the US is increasingly working with other Asian countries to counter what they see as Chinese efforts to exert control over upstream development, which could put these countries' energy security at risk.

### 3. How can markets square the circle of the US-China 'phase one' deal?

The short-term stabilisation offered by the 'phase one' deal seems at odds with the longer-term trend for US-China relations. And given the assessment that the 'phase one' deal is a political document rather than a roadmap for trade flows, markets are receiving mixed signals about the potential shifts in trade flows.

Even when the 'phase one' trade deal between the US and China was signed in mid-January 2020, China's pledge to purchase more than \$50 billion-worth of energy goods over the next two years (from a 2017 baseline estimated at around \$8 billion) seemed like a lofty goal. Now that China's demand has slowed considerably, even assuming a strong recovery later this year, reaching these import targets seems almost impossible. Yet currently there does not seem to be any discussion of feasibility within the US administration, just as there were few implementation guidelines after the deal was signed. It remains unclear how the 2017 baseline was derived (was it using US or Chinese customs data?) and how purchases would be tallied later this year.

When looking at the practicalities of the deal, even if China does not fully meet its purchase agreements, it would still need to show some increase in flows. As the deal was signed, and notwithstanding the impact of COVID-19, in order to come close to the purchase targets, China's oil imports from the US would need to reach 0.7–1 mb/d in 2020 (vs a peak of 0.47 mb/d of US crude imports) and LNG would need to reach 5–7 Mt (vs. a peak of 0.52 Mt) and these estimates assume oil at around \$50 per barrel and LNG at over \$4/mmbtu. Both the drop in Chinese demand and the more recent collapse in prices further complicates the accounting. Arguably, at the time the deal was signed, the Chinese government was aware of COVID-19 and still committed to the deal, suggesting some degree of confidence in China's ability to reach the stated targets, although the deal also includes a number of clauses that could limit purchases based on market conditions.

But are crude oil or LNG markets better able to deal with the looming (and uncertain) shifts in trade flows? LNG sellers have anecdotally started receiving requests for US volumes. For large LNG sellers, it would be possible to direct US-origin cargoes to China through portfolio optimisation especially as Chinese buyers are probably willing to pay a small premium for such diversions, much like they found ways to avoid US-origin cargoes since the tariffs were imposed. Yet LNG markets are not as deep and liquid as oil markets so what would higher takes of US LNG mean for Chinese imports from Australia or Qatar, for example? Moreover, given the inherent uncertainties in US-China relations (see above) would Chinese buyers want to put all their eggs in the proverbial US basket, given that they have been working hard to diversify their import sources and have additional pipeline supplies from Russia starting up this year?

That said, even oil markets may struggle to divert as much as 1 mb/d of US crude to China. First, most of the volumes are light sweet shale oil and Chinese refiners have a diet of medium heavy crudes; second and related to this, given this baseload, very little US crude can go into China's strategic petroleum reserve (SPR); third, even if the arb were open, can the US export infrastructure accommodate this large shift? Even if US crude exports to China cannot reach 1 mb/d, any diversion would still leave West African crudes as the most likely losers.

#### **4. Liberalisation could favour the incumbents in the domestic gas market...**

As the Chinese government focuses on curbing the spread of COVID-19 and reinvigorating the economy in the near term, other policy items may be delayed, including work on developing the regulatory framework required for market liberalisation. There is also some concern that the economic downturn will lead to financial stress in the private sector, weighing on some of the new entrants in the oil and gas sector. Progress on the new pipeline company (CNOGPC), which was launched at the end of December 2019, has slowed for now but despite these short-term wobbles, the government remains committed to opening up the market.

Indeed, the CNOGPC will continue to take shape over the next few years. Currently, the company's largest shareholder will be the State-owned Assets Supervision and Administration Commission (SASAC), the owner and manager of China's large state-owned companies, as well as by the three state-owned majors. The latter, however, are expected to have equal shares, all smaller than SASAC's equity. Over time, CNOGPC is expected to own all the country's pipeline assets though initially it will incorporate the major trunk lines—with provincial assets transferred at a later stage; a number of LNG terminals as well as underground storage assets. It remains unclear, though, how the asset transfers will be managed and how they will be valued, but for now, the sales contracts underpinning supplies into the infrastructure will not change with the asset transfers. The process will be regulated by existing ministries, and no separate regulatory body will be established. Unbundling is seen as a necessary step—alongside moves to open up the upstream and downstream—allowing more non-state actors to compete in the market.

The creation of the CNOGPC is just the first step though. As the sector looks to move toward a more market-oriented structure, it still suffers from limited upstream competition, slow progress on price reform (as most of the gas sold is still subject to city gate prices that are set by the government), difficulties in implementing Third Party Access (TPA), and hindered by long term LNG contracts. While the goal is to allow end users including city-gas companies, LNG traders, and power plants to negotiate directly with suppliers, access to local pipeline grids across as many as 20 provinces remains a hurdle given their complex ownership structures. Currently, almost all local pipeline companies are both distributors and shippers. Over time, these two roles will need to be separated. When that happens downstream demand is set to increase, but this will also be contingent on price reforms.

The government is hoping to create an accurate price signal which will allow the market to deal with the seasonality in demand, but while the current pricing hubs (the Shanghai and Chongqing exchanges) were good starts, there would need to be more transparency in data (on supply, demand, pipeline capacity) and in reported transactions and prices—processes that are likely to be protracted. The pipeline company is just the beginning of the unbundling and liberalisation process in China and is likely to take several years. Ultimately, the expectation is that prices will fall and a number of new actors and

business models will emerge, this in turn should release pent up demand and allow the market to supply it in a timely manner. While the liberalisation process may seem counterintuitive in a heavily state-owned economy, the need for non-state actors in the system stems from a number of factors: first, a desire by at least some officials within the system to see markets play a more decisive role in the economy, although the extent of this role is likely debated internally; second, a recognition during the anti-corruption campaign against the oil and gas majors that China needed additional corporate actors to ensure a well-functioning system and finally, that a more competitive environment would also benefit the state-owned majors, even though the goal is by no means privatisation.

In the near term, the CNOGPC will force the majors to pool their assets and improve coordination on their infrastructure, but they are also actively beefing up their downstream assets. The second-tier LNG importers could find it harder to benefit from the unbundling process in its early stages given that the CNOGPC does not include the local pipeline networks on which they rely the most.

Indeed, China currently has an estimated 70 Mtpa of LNG import terminals, of which just over 10 Mtpa is not state owned, and in 2019 these accounted for roughly 7 per cent of imports (of around 5 Mt). Between now and 2023 as much as 140 Mtpa of new LNG terminals are in various stages of planning, half of which are privately-owned. But of that, a more modest 40 Mtpa has cleared the various planning stages, and still includes a large 25 Mtpa which is not state owned. Assuming China's LNG import terminals reach around 100 Mtpa by 2023, roughly a quarter of that could be privately owned, assuming, also, that the unbundling process continues.

Currently, the second-tier LNG imports rely on trucks to move LNG as using the majors' midstream infrastructure comes with considerable constraints and costs. And, given that their finances tend to be more constrained than the majors', it is harder for them to sign long-term supply contracts. At the same time, they are not tasked with ensuring supply security—which the majors are—and can target the off-grid market, in which LNG costs are negotiated directly with end-users. As the unbundling process unfolds, new entrants will see new opportunities, but in the initial stages of reform, the incumbents are likely to be better positioned than their private peers.

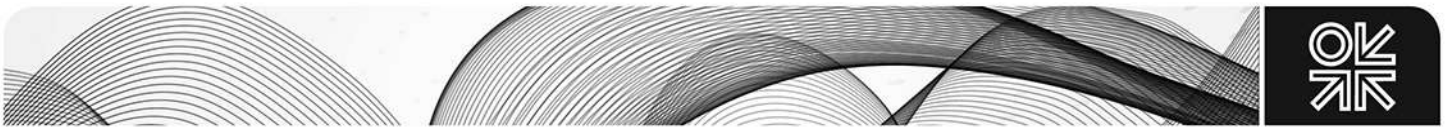
## 5. ...but could prove detrimental for the majors in the oil sector

But the situation is slightly different in the oil market, where new entrants already account for a larger share of both the import market and oil product supplies (although they are constrained in terms of exports). The majors are increasingly challenged by the Shandong teapots and by the new private refineries, Rongsheng and Hengli, and the response to COVID-19 may be offering the market a dry run of Chinese refiners' triage capacity in an oversupplied market.

Assessing China's oil supply and demand fundamentals is extremely challenging given the data limitations. But various estimates suggest that over the course of February, runs fell by 3.3 mb/d with similar volumes expected for March (from 13.8 mb/d in December 2019). Lost product demand over February and March is estimated at 150 mb, though other estimates had it at double these volumes, some of which can be regained, depending on the strength of the recovery.

Refiners have cut throughputs probably roughly on par with the demand hit. But the run cuts were shouldered mainly by Sinopec, China's largest refiner, and the independents. The latter have cut runs by an estimated 1.2 mb/d, as they are generally first responders in a disruptive situation, while Sinopec cut around 1.4 mb/d of runs. The new private mega-refineries, however, have a lot of tank space, and were still running at around 90 per cent whilst storing products.

When looking at crude activity, the impact does not seem to be as severe as the estimated end product demand hit. Crude buying has slowed into China but not collapsed, though there are longer lead times in terms of response. Indeed, the premium for crude traded and delivered to Shandong on an ex-ship basis was at an all-time low in February, but by early March a slight increase in domestic product prices led to a modest recovery in crude buying. The Shandong independents own limited product tank space and tend to run only as much as the products they can sell. They are constrained by the majors' ability



to sell, store, and export products. Prior to the Lunar New Year, they had raised throughputs and sold products to the majors whose product tanks are now full and must therefore clear tank space through exports. In late February, the export arb from China to Singapore was wide open, suggesting a flow of both gasoline and jet out of China, even as demand is slowing globally. Given the overhang in products, China's ability to respond to low crude prices and import cargoes is also limited. To be sure, China still has considerable space in its crude tanks (be they designated strategic petroleum reserve (SPR) tanks or commercial sites) but, given the limitations on the product side and the limited uptick in demand, importers' ability to absorb the excess crude in the market is constrained.

Considering the growing overhang and the worsening financial outlook in the country, there is a possibility of some rationalisation in the domestic refining industry. But will this finally be the Shandong teapots' death knell? They have struggled with tighter financing and more stringent tax enforcement as well as tightening environmental standards for the past two years, and while there have been reports of the trading arm of Tianhong chemical going into financial receivership, there have been only a handful of bankruptcies in Shandong. Even these have had a limited impact on throughputs as larger and more sophisticated refineries have increased their processing volumes. Ironically, perhaps, the economic slowdown could prompt the Shandong authorities to issue additional support to the independents. But if the response to COVID-19 is telling of what rationalisation in the domestic refining industry could look like, it could end up being worse for the majors than for the independents.