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China's climate and energy policy after the Two Sessions:

More wait and see

OIES ENERGY COMMENT

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Summary

- China's all important "Two Sessions" wrapped up in Beijing on 13 March 2023, setting out the key macroeconomic priorities for the year and suggesting a cautious growth outlook.
- Beijing set to deliver its "around 5%" GDP growth target, suggesting a recovery in energy consumption. But the nature of the economic rebound—whether it is more consumer-led or infrastructure-heavy—will determine oil product use and the strength of gas consumption.
- We expect oil demand to grow by 0.7 mb/d y/y and gas use to rise by 20-25 bcm y/y this year.
- The Two Sessions also emphasized coal and energy security, using new language about coal being the mainstay of the country's energy system, a departure from previous policy documents that discussed coal's gradual transition to a supplementary energy source.
- Clean energy additions are unlikely to slow so China's 2030 and 2060 carbon peaking and neutrality goals remain within reach.
- But the policy stance on coal will limit the space for raising China's climate ambitions or accelerating the low-carbon transition in industry.
- The continued investment in coal infrastructure will make meeting the low-carbon objectives more challenging while raising the absolute quantity of carbon dioxide emissions over time.
- The government called for an all-of-the above approach to energy supplies, with the exception of gas, where Beijing is limiting coal-to-gas switching for now.
- While markets were discussed at length, market reforms still on the backburner as government maintains a strong role in energy sector management.

Introduction

China's all important Two Sessions wrapped up in Beijing on 13 March 2023, laying out the policy trajectory for the year. The government emphasized the economy, security, stability and innovation, but beyond these broad statements of intent, and a focus on energy supplies, much remains open to interpretation. Subsequent policy documents issued by the National Energy Administration (NEA) in April, reiterated an all of the above approach to energy supplies, but demand will ultimately depend on the pace and shape of economic recovery.

Every March, China's parliament, the National People's Congress (NPC) and the Chinese People's Political Consultative Conference (CPPCC), an advisory body, hold their annual meetings, from where the name "Two Sessions" is derived. Thousands of delegates from China's provinces, businesses and even celebrities descend on Beijing for the event and, as the country's largely rubber-stamp parliament, they ratify legislation, personnel changes, bureaucratic changes and the government budget.

Premier Li Keqiang delivered the government's Work ReportWork Report, followed by the National Development and Reform Commission (NDRC) and the Ministry of Finance's[1] Work ReportWork Report, all of which make for essential reading as they outline the key priorities for the year. Beyond issuing the macroeconomic guidance, the Two Sessions also rubber stamped the new government, confirming Xi Jinping's third term as President and ratifying a new cabinet (following on from changes in the Chinese Communist Party, CCP, line up unveiled in October 2022). The Two Sessions also approved a much anticipated bureaucratic reorganisation, including empowering the Ministry of Science and Technology (MOST), a revamp of the financial regulator and the creation of a new data commission. Finally, discussions, presentations and debates at the side-lines of the Two Sessions are also significant as they offer insights into what provinces and industries are heralding as their big achievements, or policy proposals they hope to raise on the policy agenda.

[1] An English version of the Government Work Report can be found here: https://npcobserver.com/wp-content/uploads/2023/03/2023-Government-Work-Report.pdf

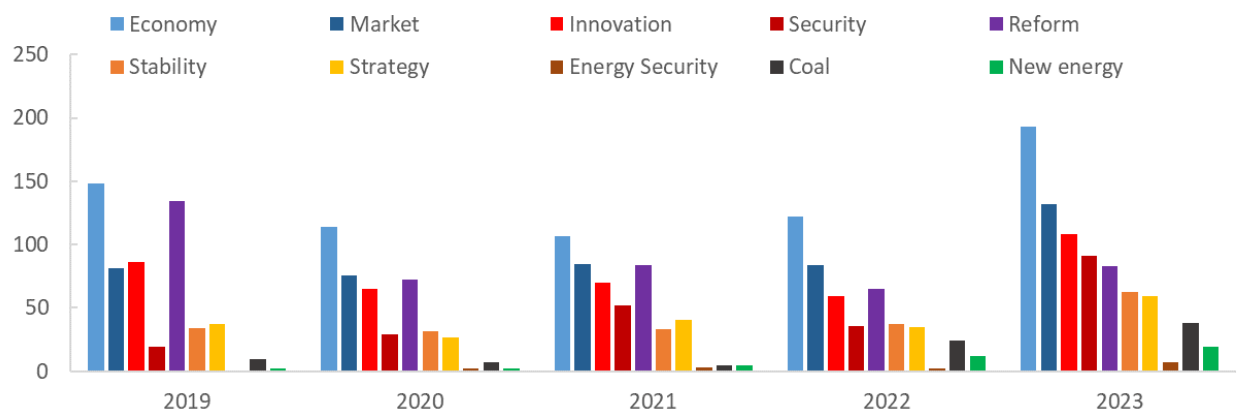
As such, the Two Sessions offer insights – but also raise questions – about many aspects of the Chinese economy. This Comment focuses on the implications for energy markets and policies.

It's the economy, stupid!

If there was any doubt that the economic slowdown was a concern (and likely a key consideration behind the government's recent U-turn on COVID[2]), then the fact that the word "economy" was mentioned 193 times in the NDRC Work Report—compared to 122 last year—and 110 times in the government Work ReportWork Report vs 62 in 2022—is testament to its importance. "Innovation,", "security", "reform" and "stability" were also key words (see figure 1) highlighting the main issues on policy makers' minds[3]. Indeed, Premier Li listed a long list of challenges in his Work Report, including slower global growth, low business confidence, and fiscally stretched local governments. President Xi Jinping went further to also call out the US and its efforts to supress China as a critical challenge.

But while the need to support economic expansion is clear, the GDP growth target for the year was set at "around 5%", a slightly more conservative goal than markets were expecting[4]. This likely reflects a recognition of the numerous challenges the economy faces, including swelling local government debt and a weak external environment. .

Figure 1: Word count, NDRC Work Reports



Source: NDRC, OIES

Alongside its conservative growth target, the government also suggested caution with regards to any potential fiscal stimulus, setting the budget deficit at 3% for 2023, slightly higher than last year (2.8%) but lower than 2020 (3.6%) and 2021 (3.2%). Importantly, the issuance of local government special-purpose bonds (which are used to finance infrastructure spending) is targeted at RMB 3.8 trillion, which is only moderately higher than the average RMB 3.7 trillion for the period 2020 to 2022. Importantly, though, land sales—a major source of local government revenue—are expected to stagnate. Finally, in terms of monetary policy, the government stated that money supply and total social financing will be consistent with nominal economic growth, suggesting that a credit binge is not in the cards either. The message (or hope) seems to be that undoing zero-COVID, and softening the crackdowns on real estate and tech should be enough to generate growth, without the government needing to implement extraordinary support measures.

[2] Minxin Pei, "The Sudden End of Zero-Covid: An Investigation", China Leadership Monitor, 1 March 2023, https://www.prcleader.org/pei-spring-2023

[3] The Work Report contained an assessment of the past decade given that it was drafted by the outgoing government so many of the words used reflected the government's past achievements. Nonetheless, it framed past achievements in the context of current challenges, and included targets for the year ahead.

[4] Kevin Yao: "Exclusive: China increasingly ambitious with 2023 growth target, may aim for up to 6%", Reuters, 2 March 2023, https://www.reuters.com/world/china/china-increasingly-ambitious-with-2023-growth-target-may-aim-up-6-sources-2023-03-02/?mc_cid=c3e21ff00d&mc_eid=4912bc2dc4

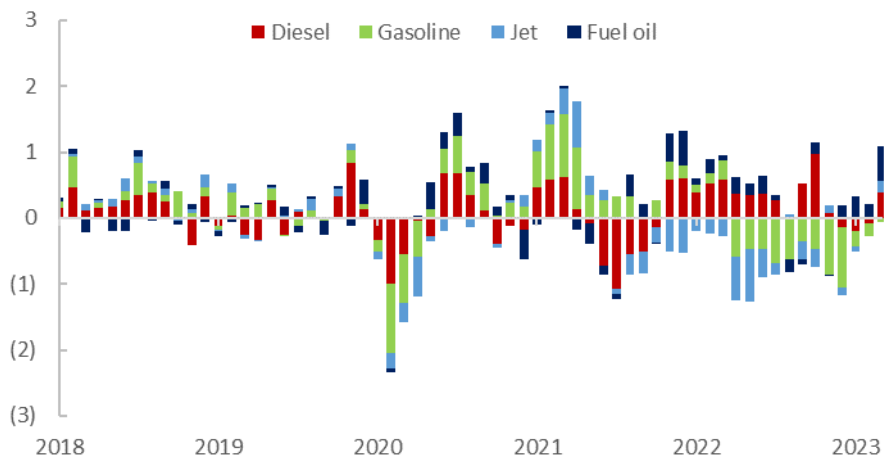
And in keeping with the desire to rebalance away from infrastructure spending toward domestic consumption, the government also wants incomes to rise in line with economic growth, with the NDRC Work Report noting that people have been cautious about spending as personal income growth has slowed. In this vein, the government plans to create 12 million new jobs, which is higher than in previous years (when 11 million was the target), although it is in line with job creation in 2022. And for China to increase its growth potential while relying on consumption, it needs to call on the private sector once more. Indeed, both President Xi and the incoming premier Li Qiang promised the embattled private sector equal treatment with state firms.

Implications for energy demand

China's anticipated economic recovery will underpin energy demand growth. The China Electricity Council (CEC) expects power consumption to increase by around 6% in 2023.[5] But it remains unclear how much growth will come from mobility and consumption (which supports light ends and petrochemicals in oil predominantly) and how much from real estate and infrastructure, which offer broader based support for coal, distillates and natural gas.

Q1 GDP growth, which recorded a strong 4.5% y/y expansion, suggested much of the activity was concentrated in consumption. Retail sales in March rose by 10.6% y/y, its highest growth level since June 2021, benefitting mainly from a surge in catering services. Industrial output grew more modestly, however, by 3.9% y/y while Q1 23 fixed asset investment was weaker than expected, increasing by 5.1% compared with a year ago on slower growth in infrastructure and manufacturing investment. Real estate investment also continued to decline. Private investment saw limited growth and youth unemployment surged to the second highest level on record, highlighting private sector concerns about the country's long term prospects.

Figure 2: China's oil demand growth, y/y change, mb/d



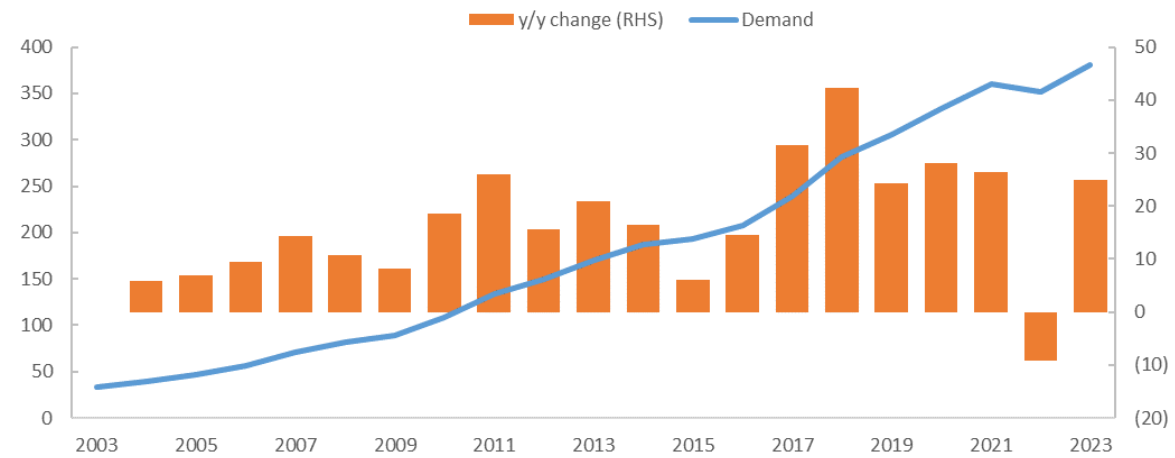
Source: NBS, Customs, OIES

While the government will likely seek to support growth in order to reach its growth target for the year, it will likely be challenging to exceed it significantly given local government debt and the weak external environment. As such, we expect oil demand to rise by around 0.7 mb/d y/y and gas consumption to grow by 20-25 bcm given that industrial activity will also rebound. And since gas demand by the industrial sector relies heavily on refining, chemicals alongside lighter industries, recovery in these

[5] https://cec.org.cn/detail/index.html?3-317477

sectors will support gas consumption[6]. But as we have argued previously, the exuberance in the market about China's re-opening trade should be tempered[7].

Figure 3: China's gas demand and y/y change, bcm (2023 forecast)



Source: NBS, Customs, NDRC, OIES

Old King Coal

The other question is what the recovery means for coal consumption. Chinese consultancy Mysteel, expects a very modest increase in coal consumption in 2023 as it forecasts little upside for heavy industry and expects increases in low-carbon energy to cover most of the growth in China's electricity demand. Still, economic growth and stability are key, so reliable energy supplies are critical. The NDRC Work Report mentions "energy security" seven times, compared to two mentions in 2022 and is noteworthy in its multiple reference to coal (38 to be precise, up from 24 in 2022 and 5 in 2021). The government Work Report calls for China to "give full play to coal's role as the main energy source"[8] and omits last year's calls to "orderly reduce and replace coal". The Work Report also drops mention of the carbon Emission Trading System (ETS).

The NDRC Work Report reiterates the principle of "building the new before breaking the old" but still emphasises the need to develop "advanced and clean coal-fired power generation" and reiterates that China will continue to "build high-standard modern coal mines, better supervise the implementation of medium-and long-term contracts between power plants and coal mines, and enhance railway transportation capacity for coal". And even though China will increase power supplies from all sources, it will focus "particularly [on] the more reliable ones like coal-fired power". Moreover, the NDRC is looking to promote the coal chemical industry as it continues to develop world-class petrochemical bases and enterprises.

Quality control

But increasing coal supplies comes with a raft of additional challenges, including assessing their environmental impact. China's conflicting coal data for 2022 has recently come under the spotlight as reported coal consumption data was at odds with coal power generation and industrial production data. China's official coal consumption data pointed to a 4.3% increase in demand in 2022[9]. In contrast, activity in the main coal-consuming sectors ranges from weak growth in coal-fired power generation

[6] OIES Quarterly Gas Review – Issue 21, April 2023, https://www.oxfordenergy.org/publications/quarterly-gas-review-issue-21/
[7] "Key themes for the global energy economy in 2023", OIES Paper SP 21, January 2023, https://www.oxfordenergy.org/publications/key-themes-for-the-global-energy-economy-in-2023/
[8] The phrase used in Chinese is "发挥煤炭主体能源作用."
[9] http://www.ce.cn/xwzx/gnsz/gdxw/202301/18/t20230118_38353362.shtml

(+0.7%) to declines in steel (-2%) and cement (-11%) production. This not only impacts calculations of China's CO_2 emissions in 2022, but also create uncertainties in assessing the evolution of China's energy demand, particularly coal demand.

One reason for the inconsistencies in the coal data could be the decline in the calorific value of coal in 2022, i.e. the amount of energy contained in each tonne of coal. China's regulators ordered miners to ramp up coal production to ensure supply, but the rush to increase output likely came at the expense of quality. First, miners may have compromised the coal washing process, reducing the calorific value of the coal. Second, with the NDRC introducing a cap on the coal price from March 2022, some coal miners might have deliberately offered low-quality coal as high-quality coal, earning a better margin through this practice. In its January 2023 press conference, China Electricity Council officials criticised this malpractice, and the regulator has repeatedly sought to ensure "compliance with medium- to long-term coal contracts" and "the quality of thermal coal". If coal quality is to be taken into account, Carbon Brief argues that coal demand was flat in China, and in turn, that emissions also declined[10] .

Indeed, the coal quality issue dates back to autumn 2021, when widespread power shortages occurred. The China Electricity Council stated that, "In 2021, the calorific value of thermal coal decreased by 110 kcal from 2020, -2.3% year on year". It is not known how much more the calorific value of thermal coal fell in 2022. A recent survey of 8 coal mines in China's western provinces revealed that the calorific value of their coal declined by 6-7% in 2022. Meanwhile, state-owned mines have said that the calorific value of their coal remains unchanged. Thus, the average calorific value is likely to have fallen by a further 2% compared with 2021. The extent to which the push for additional supplies will impact coal quality in 2023 is yet another open question.

An (almost) all-of-the-above approach to energy

While the government and NDRC Work Reports emphasize coal, they also note the need to advance wind and solar capacity, and develop energy storage industries.

The NEA Guidance for 2023 begins by stating the importance of energy supplies noting that: "In order to thoroughly implement the decisions and deployments of the Party Central Committee and the State Council, **ensure the safe and stable supply of energy, and continue to promote the high-quality development of energy** *[emphasis added]*, these opinions are formulated." In 2022, the NEA Guidance started with: "In order to thoroughly implement the decisions and deployments of the Party Central Committee and the State Council, **and continue to promote the high-quality development of energy** *[emphasis added]*, this opinion is formulated.[11]"

An all-of-the-above strategy, albeit with a more nuanced view on gas, where the government is calling to limit new coal-to-gas switching projects in order to ensure supply security. Indeed, even as economic activity recovers and global LNG prices are falling, Chinese buyers remain cautious about gas imports. The NEA guidance for 2023 suggests China should "study and revise its natural gas utilization policy"[12] likely prompting a wait and see approach from new buyers. The focus of the NEA guidance is overwhelmingly on new gas supplies, additional storage tanks and pipeline capacity.

Renewables continued to be mentioned prominently in both the government Work Report and the NDRC report. As already noted, the word count for renewables and new energy grew in line with that of coal or other fossil fuel-related terms. The Work Report emphasizes clean energy bases, while omitting language from the 14th Five-Year Plan on distributed energy, suggesting that policy makers will not prioritize efforts to transition towards distributed energy or new patterns of energy consumption and production in the near-term.

[10] Lauri Myllyvirta, "Analysis: Contradictory coal data clouds China's CO2 emissions 'rebound' in 2022", Carbon Brief, 15 February 2023, https://www.carbonbrief.org/analysis-contradictory-coal-data-clouds-chinas-co2-emissions-rebound-in-2022/

[11] National Energy Administration, Guiding Opinions on Energy Work in 2022, 2022 年能源工作指导意见, 29 March 2022, http://www.gov.cn/zhengce/zhengceku/2022-03/29/content_5682278.htm

[12] National Energy Administration, Guiding Opinions on Energy Work in 2023, 2023 年能源工作指导意见, 12 April 2023

In late 2022, the NEA set a target for wind and solar additions of 160 GW for the full year of 2023, likely reflecting mainly projects that are already in the pipeline. In 2022, NEA reported that China added 38 GW of wind and 87 GW of solar PV,[13] so the 160 GW would represent a 28% increase on the prior year. Thus, while coal appears to have priority, there is no sign that renewable energy additions will slow. The wind and solar share of total electricity generation reached 14% in 2022, up 2 percentage points y/y. That share should continue to rise in tandem with capacity, given moderate demand growth and administrative mandates to limit curtailment, though coal plant output will continue to rise as well.

The NEA guidance for 2023 also highlighted wind and solar capacity additions, encouraging new projects in the large bases in the Gobi Desert as well as decentralised projects, calling also for the promotion of green certificates and linkages with carbon trading—acknowledging the emissions trading system where the NDRC Work Report was silent.

Rising energy storage numbers—mainly driven by administrative requirements placed on wind and solar developments—could gradually help to alleviate policy makers' reluctance towards relying on renewables to meet rising peak demand. In 2022, China had around 9 GWh of battery energy storage, and a total of 59 GW of overall energy storage, 46 GW of which was pumped hydro.[14] Provincial 14th Five-Year Plans target 67 GW of battery energy storage by 2025.[15] While this will still be far short of the wind and solar capacity at that time, it will provide substantially more flexibility for the system than had existed in the past.

Though coal and renewables often get more attention, nuclear was a surprisingly prominent topic of speeches and proposals at the NPC. Several speakers, including Wen Shugang of Huaneng (one of the Big Five power generators), Yang Changli of the China General Nuclear Power Corporation (CGN), Liu Tiezhong of China National Nuclear Power (CNNP) all spoke of the need to accelerate development of new nuclear reactor technologies, especially high-temperature gas-cooled reactor technology.[16] The three also promoted using nuclear energy to provide low-carbon industrial heat in northern cities.

Perhaps not surprisingly, Yang promoted an aggressive build-out of nuclear for the purposes of carbon neutrality, calling for approval of 10 new reactor units annually for the next 10 years, reaching 150 GW by 2030. Liu also suggested launching nuclear energy as a backup power source in provinces with high clean energy output. Many such provinces are inland, where several projects have remained stalled since a 2011 review following the 2011 Fukishima disaster. Reportedly, nuclear plant approvals in 2023 look set to accelerate, including for inland plants in Guizhou, among others.[17] Yet for China to reach 150 GW by 2030, project approval and construction would need to be rapid[18].

Demand side measures still seem marginal

Indeed, according to the Work Reports, energy supply and demand in China are still tight so adding capacity remains a high priority to ensure that energy security can be maintained "during extreme weather events" in part also because "we are facing quite a few challenges in reducing the intensity of energy consumption". In an interview given during the Two Sessions, Zhang Jianhua, head of China's National Energy Administration (NEA) highlighted the need to increase energy saving measures, calling for energy demand reductions and demand-side flexibility to be put on an even policy priority with adding new supply.[19] But it remains to be seen whether any new policy measures will be put in place to realize this vision, given the multiple economic and institutional barriers that have historically limited progress on moderating demand growth or making demand more flexible.

[13] National Energy Administration, 18 January 2022, http://www.nea.gov.cn/2023-01/18/c_1310691509.htm
[14] https://m.yicai.com/news/101697187.html
[15] https://news.bjx.com.cn/html/20230116/1283429.shtml
[16] 'Compilation of motion proposals by 20 representatives of the National People's Congress and the National People's Congress,' International Energy Network, 9 March 2023, https://mp.weixin.qq.com/s/Jk3UlsFcYsp94_2gzV_HVw.
[17] David Fishman, https://twitter.com/pretentiouswhat/status/1642848922497589248
[18] Philip Andrews-Speed, "Nuclear Power in China: its role in national energy policy", OIES Paper CE3, January 2023, https://a9w7k6q9.stackpathcdn.com/wpcms/wp-content/uploads/2023/01/Nuclear-Power-In-China-CE3.pdf
[19] https://www.cpnn.com.cn/news/nytt/202303/t20230309_1589491.html

The NDRC Work Report pledges to "work actively and prudently toward the goals of reaching peak carbon emissions and carbon neutrality", to "implement a comprehensive conservation strategy; coordinate industrial restructuring, pollution control, ecological conservation, and climate change response; and promote concerted efforts to cut carbon emissions, reduce pollution, expand green development, and pursue economic growth."

For China to meet its energy and carbon intensity targets set out in the 14th Five Year Plan (FYP), it will need to see dramatic falls in its carbon intensity over the next few years. The 14th FYP aims for a 13.5% reduction in energy intensity (energy consumption per unit of GDP) and an 18% decrease in carbon intensity (CO2 emissions per unit of GDP). According to official data, China's GDP grew by 3% in 2022 and energy use rose by 2.9%, and CO2 emissions from energy increased by 2.2%. Carbon intensity, therefore fell by 0.8% and energy intensity by 0.1% in 2022. When taking into account a 4% increase in CO2 emissions and 4.6% rise in coal use in 2021, China's CO2 intensity will need to decline dramatically through 2025, even if this year's coal consumption and CO2 emissions are subsequently revised down. The NDRC is currently targeting a 2% decline in energy intensity in 2023.

Economic growth, security and stability are recurring themes of these Two Sessions and what is clear is a need to support domestic production with resources including oil and gas, but also iron ore, potassium, and lithium mentioned specifically. The government also calls for improving a national reserve system, with the Ministry of Finance's budget earmarking RMB 133 billion ($19 billion) for stockpiling grain, edible oils, and other materials, a y/y increase of 13.6% and a larger increase than military spending (which is set to rise by 7.2% y/y although spending on national defence is pledged at RMB 1.6 trillion) and a comparable allocation in the central budget as the education expenditure.

Two longstanding policy tensions remain

The wordy texts of the Work Report and the NDRC's draft plan for 2023 fail to conceal the persistence of two longstanding tensions in the nation's energy policy, namely the role of the state vs market in resource allocation and fossil fuels vs clean energy.

The role of the state and the market

Reforms to China's energy sector have been proceeding piecemeal for decades. The most radical of these reforms took places during the period 1998-2003. Talk of reform then stalled until policy documents released soon after Xi Jinping came to power emphasised the need for prices to be set by markets. In 2015, the government published a strategy to promote the role of markets across the entire power sector. However, today power tariffs are still controlled within a limited band and 80% of electricity is traded on medium- and long-term contracts. The creation of PipeChina has increased access to oil and mainly gas pipelines for third parties, but natural gas prices have yet to be fully liberalised. The national carbon market commissioned in July 2021 is limited to thermal power plants, is based on emissions intensity not quantity, and has been plagued with problems such as low liquidity and fraudulent reporting[20].

In terms of official language, the wording of the Government Work Report this year kept language unchanged from the prior year regarding the ambition to "enable the market to play a decisive role in resource allocation." This language has been around since it was first put forward in 2013. However, this year's Work Report immediately followed this with new language, calling for China to "give full play to the role of the government and promote a better combination of an effective market and an effective government." The addition appears to significantly qualify the importance and priority attached to market reforms, certainly in 2023 but perhaps also beyond. Indeed, macro policies on carbon, energy security and economic growth are set to guide energy project approvals and investment priorities, but micro-level planning will remain in the driver's seat for determining energy prices and revenue shares for various segments of the energy economy.

[20] For more background on price reforms and China's carbon market see David Sandalow et. al, *Guide to Chinese Climate Policy 2022*, OIES, https://chineseclimatepolicy.oxfordenergy.org/

The two views of reform – whether it should be accelerated or more restricted by policy and planning – were both in evidence at the NPC. Meng Zhenping, chairman of China Southern Grid, said that markets were essential to realizing carbon peaking and carbon neutrality, and the present electricity market lacks the ability to enable price discovery, adjust supply and demand, and allocate resources efficiently. He emphasized the urgent need to improve the connections between inter-provincial, inter-regional and intra-provincial markets, and break down inter-provincial transaction barriers.[21]

In contrast, other prominent energy officials discussed the need for pricing or supply reforms emphasizing state planning. For example, Zou Lei, chairman of Datang, one of the Big Five generation companies, talked of the need to improve the "price mechanism" for coal power to ensure coal can be used "at a high level." Other state-owned enterprise leaders, such as Qian Zhimin of SPIC and Jiang Yi of Huadian, also expect that State Owned Enterprises (SOEs) will drive innovation in China's energy fields, based on their "management and technology advantages." Such remarks tend to emphasize the long-running contradiction between high-level commitments to market reform in the power sector versus the interests of powerful SOEs that have generally favoured administrative reforms that allow them to retain revenue stability and control over the pace of the energy transition in the name of energy security.[22]

Fossil fuels and new energy

The role of coal represents another longstanding contradiction in energy policy discourse, given the ongoing prominence of the dual carbon goals at the same time as top leaders continue to promote coal production and coal power plant construction for energy security. Until late 2019, China's central government emphasized the need to constrain and eventually shrink the role of coal in the energy mix and rely increasingly on low-carbon sources of energy. But rhetoric on energy security has intensified since then due to a combination of international pressures and domestic energy supply crises. Although NEA in early 2022 issued a directive that new coal plants should only be approved for peak regulation or backing up renewables, not for bulk power production,[23] the rush of new coal plant approvals in 2022-2023 suggests newly approved plans will not be used only for backup.[24]

As a result, the production and consumption of coal continues to rise. In 2022, domestic coal production rose 11.4% to 4.48 billion tonnes, though consumption may have been flat. 300 million tonnes of new coal mine capacity and 40 GW of new coal-fired generation capacity were added that year. Plans for 2023 include about 250 million tonnes of new coal mine capacity and 70 GW of new thermal power capacity. In the meantime, investment in coal-to-chemicals continues to rise. However, carbon capture infrastructure needed to reduce emissions does not seem to be accorded a high priority, though the country's first CCUS plant with a one million tonnes per year of carbon dioxide was commissioned in 2022 by Sinopec, China's second largest oil and gas major.[25] In this vein, it was perhaps not surprising that Ma Yongsheng, chairman and Party Secretary of Sinopec, argued at the side-lines of the Two Sessions that the government should establish national CCUS standards and learn from other countries' experience in order to support the industry's development. Ma also noted that the US Inflation Reduction Act (IRA) is boosting CCUS in the country,[26] likely using this argument to advocate for stronger government incentives and support.

[21] 'Compilation of motion proposals by 20 representatives of the National People's Congress and the National People's Congress,' International Energy Network, 9 March 2023, https://mp.weixin.qq.com/s/Jk3UlsFcYsp94_2gzV_HVw.

[22] Anders Hove, "Assessing China's power sector low-carbon transition: a framing paper," Oxford Institute for Energy Studies, January 2023, https://www.oxfordenergy.org/publications/assessing-chinas-power-sector-low-carbon-transition-a-framing-paper/

[23] "国家能源局：原则上不再新建单纯以发电为目的的煤电项目 [NEA: In principle, no new coal plants for bulk power production]," National Energy Administration, 8 February 2022, https://mp.weixin.qq.com/s/cxEhkFI7fLh0Vd_1SJNDeg

[24] Lauri Myllyvirta, "More renewables, more coal: Where are China's emissions really headed?," China Dialogue, 3 April 2023, https://chinadialogue.net/en/energy/where-are-chinas-emissions-really-headed/

[25] Global CCS Institute, *Global Status of CCS 2022*, https://www.globalccsinstitute.com/resources/global-status-of-ccs-2022/

[26] "Ma Yongsheng, Sinopec Chairman: Restart the national voluntary emissions trading market and include CCUS", Jiemian, 3 March 2023, https://m.jiemian.com/article/9004618.html

That said, the NEA guidance for 2023 called to "strive to make new achievements in […] CCUS" and to "Strengthen the research on new power systems, energy storage, hydrogen energy, pumped storage, CCUS and other standard systems, focus on supporting the establishment of standards related to energy carbon peak carbon neutrality, and speed up the formulation and revision of key standards".

Fossil fuels are therefore still very much part of the picture. The Work Report is very clear about the importance of coal, including the new language calling for China to "give full play to the role of coal as the main energy source." The language appears quite strong, and quite different from longstanding language about a clean energy transition. For example, the 2016 Mid-to-Long-Term Energy Strategy document called for clean energy to meet the majority of new energy demand[27] – a concept reflected in the 14th Five-Year Plan, but omitted in 2023. While there are repeated mentions of "clean and efficient use of coal," the Work Report doesn't mention controlling the growth of coal or transitioning coal power to a supplementary role in the power system, which previous policy documents did. The NEA Guidance for 2023 further calls to "promote the commissioning and production of coal mines under construction as soon as possible, and enhance the ability to increase coal production and ensure supply"[28].

Other energy sector leaders promoted coal in various ways. For example, Liu Guoyue, chairman of China Energy, said that while "vigorously developing new energy is an inevitable trend to achieve sustainable development," nevertheless "strengthening the clean and efficient use of coal is an inevitable choice for both low-carbon development and energy security." As noted above, there have been ongoing calls to improve pricing for coal power to ensure coal power plants can make money and to ensure stable and growing output from coal mines. In terms of transitioning coal-reliant regions, whereas previously policy guidance focused on transitioning away from coal reliance, this year there was less emphasis on new industries and more on reinvesting in coal. For example, Jiang Yaodong, former vice president of China University of Mining and Technology, called for "merger and reorganization of new companies and old coal enterprises, integrating coal upstream and downstream industries, and developing emerging industries and new energy industries."[29]

Carbon markets were notably absent from the Work Report, suggesting that with the present focus on energy security the emissions trading system will remain in a nascent state of development. Still, there continue to be voices calling for carbon markets to play a more substantive role in guiding the low-carbon transition. For example, Zhang Tianren chairman of Tianneng Group, a major battery manufacturer, pointed out the low volume and prices in China's carbon markets and called for them to be expanded, in terms of volume, industry coverage, and pricing. Li Shufu, head of Geely Group, the electric vehicle maker, also called for the carbon market to be expanded to more industries and for cuts in carbon emissions to be credited to the auto sector and other consumer sectors.[30]

Meanwhile, the NEA Guidance also emphasized the need to "green" oil and gas production. It calls to "promote the intelligent and green development of oil and gas upstream. […] Issue relevant guidance to promote the low-carbon and efficient development of the oil refining industry, and promote the optimization of the refining capacity structure and layout." Plans to promote the low carbon development of oil and gas extraction were released in February 2023 by the NEA—in a policy document that seeks to increase oil and gas supplies through the replacement of on-site consumption with renewable-powered electricity[31]. The statement about "the optimization of the refining capacity structure and layout" resonates with the 14th Five Year Plan for refining and chemicals[32], which looks to limit refining

[27] https://www.ndrc.gov.cn/xxgk/zcfb/tz/201704/W020190905516411660681.pdf

[28] National Energy Administration, Guiding Opinions on Energy Work in 2023, 2023 年能源工作指导意见, 12 April 2023

[29] 'Compilation of motion proposals by 20 representatives of the National People's Congress and the National People's Congress,' International Energy Network, 9 March 2023, https://mp.weixin.qq.com/s/Jk3UlsFcYsp94_2gzV_HVw.

[30] Why do many representatives focus on the "carbon market"? China Carbon Market Net, 6 March 2023, https://www.nengapp.com/zixun/ec317017c4c72cd9102e42c9bd8a88a3

[31] NEA, "Action Plan for Accelerating Oil and Gas Exploration and Development and the Integrated Development of New Energy (2023-2025)", 2 February 2023, http://zfxxgk.nea.gov.cn/2023-02/27/c_1310704758.htm?mc_cid=65a8422950&mc_eid=1f5ebaac4b

[32] Guiding Opinions on Promoting the High-quality Development of the Petrochemical and Chemical Industry during the 14th Five-Year Plan, 28 March 2022, http://www.gov.cn/zhengce/zhengceku/2022-04/08/content_5683972.htm

capacity and gradually shift from oil products to petrochemicals. Yet new refining capacity starts this year and the allocation of large product export quotas seemed to be undermining these targets. So while the NEA Guidance seeks to maintain a balance between short term needs to meet energy demand for a strongly recovering economy, it would still like to keep the longer term needs to peak emissions.

Despite these efforts, the focus seems overwhelmingly on energy security and therefore coal for 2023. Whereas for several years China energy experts have highlighted coal's gradual transition to a supplementary energy source, there is increasing emphasis on coal as the overall mainstay of the country's energy system for the time being. While clean energy additions are unlikely to slow, and this growth will keep China's 2030 and 2060 carbon peaking and neutrality goals within reach, the present policy stance on coal will limit the space for raising China's climate ambitions or accelerating the low-carbon transition in industry. The continued investment in coal infrastructure is therefore likely to render the achievement of low-carbon objectives more challenging as well as well raise the absolute quantity of carbon dioxide emissions over time.

Conclusions

In the wake of the Two Sessions, it is clear that the government's top priorities are the economy and energy security. The focus on economic growth suggests strong energy demand but the nature of the recovery—whether it is more consumer-led or infrastructure-heavy—will determine oil product use and the strength of gas consumption. On energy security, the emphasis for now is on continuing to boost domestic coal supplies, investing in coal power, growing domestic output of oil and gas, while limiting energy imports. While the government is keen to promote the long-term ambition of meeting the 2030 and 2060 dual carbon goals of carbon peaking and carbon neutrality, and renewable energy and nuclear additions are likely to keep pace with the growth seen in recent years, the policy space for increasing the speed and ambition around the clean energy transition has tightened. Energy and carbon markets will continue to develop in a gradual, step-by-step fashion, but state planners will remain firmly in charge of key decisions around investment and pricing in the energy sector.

Of course, the actual rate of economic growth and the shape of the recovery will be key variables. At the same time, the availability of supplies (coal output, hydro levels, global energy prices and the arbitrage with domestic costs) alongside government policy choices and their ability to adapt to changes in supply or demand will impact energy choices and markets. With policy makers clearly in risk-averse mode, for now it appears that major market reform initiatives in the power or carbon sector are on hold, which in turn will affect the speed and ambition of the country's long-term low-carbon energy transition strategy as well as its potential to contribute to raising global ambitions on climate policy. 2023 appears to be a year to watch and wait.