

March 2024

China's Two Sessions: Implications for energy markets and policies



In summary:

- All eyes have been on the "Two Sessions", China's annual parliamentary meeting, for clues into macroeconomic policy and energy policy this year. But the guidance suggests a status quo of mixed messages.
- The government is emphasising support for new industries to achieve its "around 5%" GDP growth target again, although it is also planning a fiscal contraction given the dire situation of local government debt. Meeting the 5% growth target will not be easy, but it is not impossible with efforts to stabilise the real estate market, more industrial support and modest increases in consumption.
- The outlook for oil demand in 2024 remains solid: We expect a 0.6-0.7 mb/d y/y increase driven by chemicals, with middle distillates providing further support. But LNG in freight poses downside risks to diesel, just as lower LNG prices suggest upside for gas demand.
- Industrial activity combined with more gas in power suggest over 25 bcm of y/y gas demand growth
 in 2024, and low LNG prices could favour spot, potentially at the expense of term contracts. We
 currently expect LNG imports to rise by 10 bcm y/y but risks are to the upside.
- China's emissions trading system (ETS) is expanding and carbon prices are rising but from modest levels. Despite its anticipated expansion to additional sectors this year, and record carbon prices currently, its impact will be limited.
- Renewable curtailment rates are set to rise again this year because of the coal overcapacity and
 the recently introduced capacity payment mechanism. The end goal is to encourage coal as back
 up for renewables, but the short-term impact is a potential drag on their dispatch.
- Importantly, mixed policy messages will create confusion at the local level. The Two Sessions
 issued softer environmental targets, even as the country is not on track to meeting its 2025 goals.
 There is room to kick the can to 2025, but that also raises the risk of last-minute efforts to reach
 targets.

1. Macro weakness in 2023, but strength in energy demand

China's annual "Two sessions" – an important political gathering which ended on 11 March 2024 – is closely watched as it gives an indication of China's broad policy direction for the year, covering topics from the economy through industrial strategy to environmental protection. Every year, the Prime Minister delivers the Government Work Report, and the National Development and Reform Commission (NDRC) as well as Ministry of Finance also issue their annual Work Reports, summarising their work in 2023 and setting out targets and a work plan for 2024.

In terms of 2023, despite considerable concerns about the Chinese economy, the country's GDP grew by 5.2%. And while there are questions about the accuracy of the macroeconomic data¹, China's energy imports and production levels, combined with strong investments and mining activity suggest that there was momentum in numerous segments of the Chinese economy.

We have previously argued that the "Three New Industries" (electric vehicles (EVs), batteries and solar panels) have been supporting economic activity and offsetting some of the weakness in the real estate sector². Some of National Bureau of Statistics (NBS) data for 2023 support this view. Production of nonferrous metals in 2023 saw around 10% y/y growth, with surges in power generation equipment manufacturing (+28.5% y/y), production of glass for the solar industry (+58.6% y/y) as well as charging

¹ Daniel Rosen, Logan Wright, Charlie Vest, Rogan Quinn, "Through the Looking Glass: China's 2023 GDP and the Year Ahead", Rhodium Group, 29 December 2023, https://rhg.com/research/through-the-looking-glass-chinas-2023-gdp-and-the-vear-ahead/

² Anders Hove, Michal Meidan, "Four contradictions in China's energy and environmental policies in 2023", OIES Comment, December 2023, https://www.oxfordenergy.org/wpcms/wp-content/uploads/2023/12/Four-contradictions-in-Chinas-energy-and-environmental-policies-in-2023.pdf



piles³. Electric vehicle output also grew strongly, although it is not recorded in this NBS data set⁴. Related to this, according to the Ministry of Industry and Information Technology (MIIT), in 2023, China's production of polysilicon, solar wafers, cells and modules rose by 60-70% y/y each.

Despite the sharp declines in the real estate sector, production of household goods such as refrigerators and air conditioners also grew strongly, suggesting that consumption is holding up although it is more visible in travel, hospitality and e-commerce than in real-estate related spending. Indeed, freight volumes increased as e-commerce developed rapidly with highway freight up by 8.7% y/y, compared to a 5% y/y drop in 2022.

From an energy perspective, according to the NBS, output increased across the board: coal production was up 3.4%, crude output rose by 2.1%, gas production was higher by 5.6% y/y⁵. In power generation, while thermal power increased by 6.4% and nuclear by 4.1%, wind and solar were the stars with 16.2% and 36.7% increases in output, respectively. On the demand side, coal use rose by 5.6%, oil was up by 9.1% and gas grew by 7.2%. While the numbers highlight demand growth (and stockpiling cannot be discounted), they also point to high levels of energy intensity which the government must now claw back to comply with its 14th Five Year Plan targets.

Electricity consumption figures have also painted a positive picture of economic stability and industrial upgrading, with demand rising 6.7% in 2023, the fourth year in a row of electricity outpacing GDP growth. Secondary industry, the largest consuming sector covering manufacturing and most industry, grew in-line with the overall 6.7% rate. Services and primary industry (such as mining or extraction) outpaced, while residential consumption was flat from a year earlier (reflecting comparisons with the heat wave and other factors in 2022).

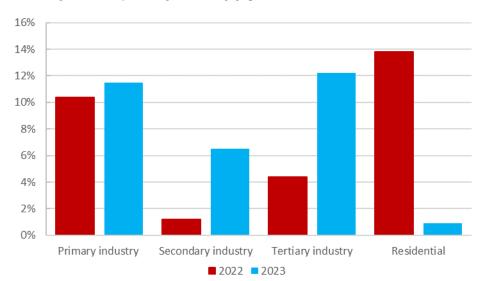


Figure 1: Electricity consumption by sector, y/y growth, %

Source: National Energy Administration (NEA)

³ Statistical bulletin of the PRC's national economic and social development in 2023, National Bureau of Statistics, 29 February 2024, https://www.stats.gov.cn/sj/zxfb/202402/t20240228_1947915.html

⁴ For un update on China's EV situation see Anders Hove, "An update on China's EV Revolution", 1 Feburary 2024. OIES, https://www.oxfordenergy.org/wpcms/wp-content/uploads/2024/02/Presentation-China-EVs-Feb-2024.pdf

⁵ Statistical bulletin of the PRC's national economic and social development in 2023, National Bureau of Statistics, 29 February 2024, https://www.stats.gov.cn/sj/zxfb/202402/t20240228_1947915.html



2. The macro policy guidance remains unchanged in 2024

How much of that is replicable in 2024? The Government Work Report and the NDRC Work Report from the Two Sessions suggested continuity for the most part, with some tweaks. The macro parameters are relatively unchanged. Targets include an "around 5% GDP" growth target again this year. But China's budget deficit has been lowered to 3% for 2024 from 3.8% in 2023 effectively pointing to a fiscal contraction in terms of GDP. That said, the local government special bond issuance was increased to RMB 3.9 trillion from RMB 3.8 trillion and there is also a 1 trillion ultra-long special central government bond issuance planned which will offer some (little) room for manoeuvre. This is still a relatively prudent fiscal policy stance, reflecting the debt burden on China's local governments and the persistently weak land sales by local governments. Meanwhile. Premier Li Qiang's Government Work Report suggests that avoiding a stimulus in 2023 was a wise choice, implicitly suggesting it remains off the cards again this year⁶. The expectation is that this year will see more of the same, except with bigger and better industrial upgrading.

Consumption and industrial policy are once again expected to be key drivers of growth. Last year's Work Reports placed consumption at the top of their list of priorities, but this year it comes after industrial upgrading (discussed below). Yet the Work Report offers few hints as to how higher consumption will happen and does not offer any dramatically different ideas to 2023. For now, sentiment remains weak: The real estate slump has many in China worried, while the stock market rout hasn't helped matters. Trade-in programmes for industrial equipment and consumer goods issued by the government⁷ could help at the margins as they seek to boost consumption, especially of automobiles, home appliances, and other durable consumer goods. The government's efforts to stabilise (but not boost) the real estate sector may bear some fruit, allowing confidence and household wealth to perk up slightly, but for now, it all seems more of the same. And for those with disposable incomes left that opt not to invest in real estate, more spending could go to travel and hospitality. A relatively status quo message from the Central Government, without the post-COVID bump of a year ago, has left many scratching their heads and assuming China won't reach "around 5%" growth.

But just like it did last year, even with weak consumer sentiment, China could deliver again. And the hope is that green industrial policy will save the day. Beijing is focusing on modernizing the industrial system and pursuing high quality development of key manufacturing chains. "New productive forces" is now the buzzword. Put simply, it means that China is going gung-ho on industries of the future, which, for energy means a focus on the "Three New Industries" (which also got a mention in the Government Work Report). This should not only help China upgrade its economic model but also help it remain central to global supply chains as protectionist policies and de-risking are in vogue in China's main trade partners. In this vein, energy storage and hydrogen received their first mentions in the Work Reports.

This industrial upgrade also includes a push to green China's industrial base. Already in late February, China's Ministry of Industry and Information Technology (MIIT) released 'Guiding Opinions on speeding up and push forward green development of the manufacturing sector⁸' which call for enhancing industrial low carbon competitiveness and a focus on recycling. The Opinions are short on specifics but send a strong signal that manufacturing needs to go green. The longer term trajectory is clear but making meaningful investments in industrial upgrading will be complicated by limited fiscal firepower at the local level and overcapacity in many industries. This is already leading to fierce competition, market compression, and a slew of protectionist policies from China's main trade partners and export markets.

The hope is that the "Three New Industries" on steroids will deliver growth, before protectionist policies hit. New Energy Vehicles (NEVs) remain a focal point given their contribution to exports in 2023. The

⁶ The full text in English is available at https://npcobserver.com/wp-content/uploads/2024/03/2024-Government-Work-Report EN.pdf

⁷ "Li Qiang chaired an executive meeting of the State Council to review and adopt the Action Plan for Promoting Large-Scale Equipment Updates and Trade-In of Consumer Goods", Xinhua, 1 March 2024,

https://www.gov.cn/yaowen/liebiao/202403/content 6935504.htm?mc cid=f7e1713014&mc eid=1f5ebaac4b

⁸ https://www.gov.cn/zhengce/zhengceku/202403/content_6935684.htm



Ministry of Commerce and eight other ministries released guidance in early February⁹ that encourages Chinese carmakers to establish overseas R&D bases and expand cooperation with overseas research institutions; urges automakers to comply with local regulations and develop a broader and deeper international footprint. The subtext is that Beijing needs these export markets to remain open as a release valve for the domestic overcapacity and in an effort to counter or at least alleviate EU concerns about unfair competition from China.

3. Build, baby, build!

The manufacturing side of the energy transition is therefore taken care of. China will keep producing components and final products for the energy transition. But domestically, the message is very mixed. We have argued that since late 2023, when GDP growth targets seemed within reach, the government began placing greater emphasis on environmental protection with a number of important policy documents¹⁰. But the Government and NDRC Work Reports do not include a sense of urgency on climate. While they do not mention "stability" and "security" as much as last year (see Figure 2 for word count), they focus on the economy, de-risking, decoupling, innovating and solidifying supply chains remains. The NDRC Work Report highlight efforts to reduce carbon emissions and pollution, develop large scale wind and solar bases as well as distributed energy, and the Government Work Report increases its mentions of "green", but they also reiterate the importance of coal (albeit with fewer mentions). In line with previous years, the Work Reports stress the need to increase domestic supplies of oil, gas as well as critical minerals.

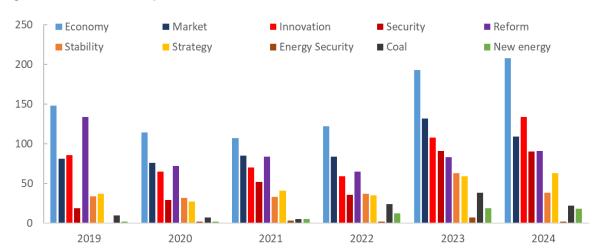


Figure 2: NDRC Work reports word count

Source: NDRC, OIES

Critically, the Work Reports include an unambitious target of reducing energy consumption per unit of GDP by 2.5% in 2024. Previous estimates suggest that to meet the 14th Five Year Plan energy intensity targets by 2025, China needs a 6% intensity reduction this year and next¹¹. When accounting for energy intensity, renewable energy is excluded so this 2.5% reduction is effectively an energy intensity reduction in coal, oil and gas. It still does not go far enough for the 2025 targets and is a departure from past Work Reports which had placed emphasis on achieving energy and carbon intensity targets. On the contrary, the new definition suggests CO2 emissions could increase by up to 2.4% this year, if GDP

 ⁹http://www.mofcom.gov.cn/zfxxgk/article/gkml/202402/20240203472074.shtml?mc_cid=c802f9d214&mc_eid=e619eb6605
 10 Michal Meidan, Anders Hove, Yan Qin, "China's policy pendulum shifts back toward environmental protection, but will bureaucracy get in the way?", OIES Comment, February 2024, https://www.oxfordenergy.org/wpcms/wpcontent/uploads/2024/02/Chinas-policy-pendulum-shifts-back-toward-environmental-protection.pdf

¹¹ Lauri Myllyvirta, "Analysis: Record drop in China's CO2 emissions needed to meet 2025 target", Carbon Brief, 22 February 2024, https://www.carbonbrief.org/analysis-record-drop-in-chinas-co2-emissions-needed-to-meet-2025-target/



growth is on target. If this happens, China would need to make dramatic progress in 2025 to meet its climate commitments¹².

The lack of meaningful environmental targets will complicate matters for provincial officials and industry groups. Chinese stakeholders are actively discussing ways to green industrial processes and position the country as a leader of low-carbon manufacturing, especially as carbon tariffs loom. But they are also being told implicitly that adding more energy intensive manufacturing capacity is still fine. The top-level ambiguity on the priority of energy and climate intensity targets could result in a scramble next year, depending on the interpretations local officials receive: it might involve a combination of far-sighted industry upgrades, emergency year-end power and production cuts, and a fudging or simply a non-release of key statistics.

4. Renewable curtailment rising

The reality of China's coal addiction and absence of effective electricity markets could hinder progress towards the 2030 target of peaking emissions and the 2060 target of reaching carbon neutrality. This is even as the renewables build-out shows no sign of slowing. According to the China Electricity Council (CEC), China's renewable additions this year, while hefty, will slow from 2023. CEC expects to see a 170 GW increase in solar PV and 90 GW of new wind capacity, alongside 35-40 GW of coal and 30 GW of other thermal, which includes gas and biomass (see Figure 3).

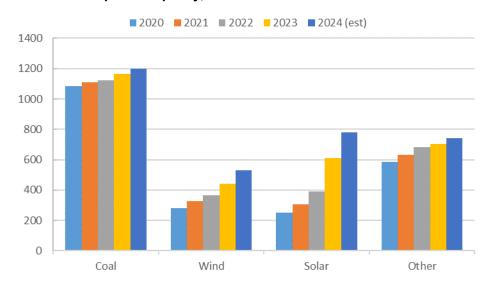


Figure 3: China installed power capacity, GW

Source: CEC

Grid planners and officials expect power demand to grow at a similar rate to 2023 in 2024 (just under 7%). But the real concern is around demand peaks and clean energy troughs, and how to meet them. Even though longer term government planning points to the need for more investment in storage and demand response, the short term response could be to fall back on coal. Last fall, we predicted that overcapacity in coal and a new flat capacity payment to coal power would eventually be paid for by covert efforts to curtail renewable output and transfer the cost to renewables and 'other generators' mentioned by the National Energy Administration (NEA)¹³. This appears to have happened faster than we imagined. Power industry officials are now signalling that grid constraints will result in greater curtailment of renewable energy, suggesting a return to the old days of 2016 when provinces, eager to

¹² Lauri Myllyvirta, "How China completely redefined a key energy target", China Dialogue, 19 March 2024, https://chinadialogue.net/en/energy/how-china-completely-redefined-a-key-energy-target/

¹³ Anders Hove. "New moves in China's power market reform chess game", OIES Energy Insight no 139, November 2023, https://www.oxfordenergy.org/wpcms/wp-content/uploads/2023/11/Insight-139-New-moves-in-Chinas-power-market-reform-chess-game-1.pdf



favour in-province generation, curtailed renewables rather than trading electricity. Administrative mandates (instead of markets) solved the problem in 2016, but the chatter suggests the government is willing to allow curtailment to drift upwards. Indeed, a new NDRC document on strengthening peak shaving and storage calls for grid and policy efforts to integrate 20% wind and solar by 2027 – though wind and solar are on track to deliver far more than this at present growth rates – and to keep curtailment only at 'reasonable levels'. This leaves plenty of room for jockeying for grid and provincial officials who typically prefer to maximize coal within-province generation.

2024 will be a complicated year for Beijing. Meeting the 5% growth target will not be easy. Efforts to stabilise the real estate market with more industrial support and modest increases in consumption should offer a year of growth. But confusion will likely reign. Foreign investors are being wooed once more, and the tone on US-China relations is softer this year. But the cancellation of the Premier's traditional end of NPC press briefing (for perpetuity!), his decision not to meet with foreign business leaders at China's Davos later this month, alongside revisions to the State Secrets Law that now widen the scope to include restricted sensitive information to "work secrets" all send mixed signals.

There are also open questions on the macro direction, given that the Chinese Communist Party (CCP) has not yet held the third plenum, which should have been convened last year. Plenum meetings are a hallmark of China's political system, with seven of them usually taking place during the five-year term of the ruling Central Committee. Each plenum tends to cover a specific theme, with the third one held typically in the first fall after a new Central Committee comes to power, focusing heavily on economic issues. In the past, third plenums have been catalysts for major economic reforms, although they have not always focused exclusively on the economy. But skipping a third plenum is unprecedented. While it could still be convened this year, its delay raises questions around potential disagreements about the way forward. A cancellation, while still not a foregone conclusion, would be even more astonishing. The cause of the delay is unclear, but if convened later this year, there is still room for macroeconomic adjustments, especially if the economy seems weaker than expected. In the meantime, local officials will also grapple with the need to meet environmental targets (at some point) and the need to upgrade their industrial bases. Focusing on the latter may come at the expense of energy intensity reductions and caps on coal and heavy industry, suggesting a dash in 2025.

5. Oil demand growth faces downside risks

What does all this mean for oil and gas demand? Chinese oil demand growth is a big sources of uncertainty for the market this year, with estimates ranging from 300,000 b/d of growth to 800,000 b/d. Our view is on higher end of that, at a 660,000 b/d increase in 2024 (Figure 4). Chemicals continue to lead the charge with new plants starting up this year, with a focus on naphtha. Even though chemicals demand from traditional sectors related to real estate is slowing, the rise of e-commerce and packaging continues to support consumption, while chemical precursors for the "Three New Industries" remain another driver of growth. But given the growing overcapacity in base chemicals, the rapid expansion of China's petrochemical capacity is likely to slow in 2024 with less paraxylene plants and steam crackers planned this year. New PDH plants this year will also support LPG demand growth. So combined, LPG and naphtha are set to account for over 450,000 b/d of demand growth. However, China's base chemicals overcapacity remains an issue, suggesting higher exports as well as more intense domestic competition between the majors, the new petchem facilities (with Yulong also joining the fray this year) and coal to chemicals¹⁴.

In terms of oil products, jet demand is likely to see additional growth as international travel picks up, while domestic tourism increases as connectivity is improved. Gasoline demand only inches up this year, given that the big increase in mobility occurred last year and as electric vehicles continue to offset gasoline demand growth

¹⁴ Kevin Tu, "Prospects of the Chinese coal chemical industry in an increasingly carbon-constrained world", OIES Paper CE13, February 2024, https://www.oxfordenergy.org/wpcms/wp-content/uploads/2024/02/CE13-Prospects-of-the-Chinese-coal-chemical-industry_FINAL.pdf



This leaves diesel as the biggest open question. In 2023, diesel use surprised to the upside despite the downturn in real estate and construction activity because of the increase in freight for e-commerce. But there are downside risks to diesel demand growth. First, the 'Action Plan for Sustained Improvement of Air Quality' issued in November 2023 looks to accelerate the shift from road transport to rail and water. This will likely take time to play out and slow diesel use. But the immediate threat is the softening of gas prices which has, already since the end of 2023, led to an uptick in the use of LNG in freight, displacing diesel consumption last year. Sales of LNG heavy trucks reportedly reached 152,000 in 2023, a three-fold increase y/y. With domestic LNG prices set to remain subdued in the coming months and diesel prices rising, LNG trucking is expected to keep growing. Price dynamics could, however, change quickly and the limited gas refuelling infrastructure as well as high upfront costs for LNG trucks could slow the switch.

Diesel use is also set to peak within the next 2-3 years, but the exact timeframe remains elusive. Government plans look to encourage more vessels powered by lower-carbon fuels such as methanol and LNG while also improving the efficiency of traditional fuel engines. MIIT in its guidance issued in December 2023, expects the environmental overhaul of the shipping industry to be completed by 2030.

Meanwhile, greater environmental scrutiny on refineries, especially in Shandong where the Yulong plant is slated to start up in the second half of the year, and limited import licences, will limit the teapots' runs and ability to source sanctioned crudes. At the same time, the limits on product exports, which are likely to be capped at 2023 levels, suggest lower refinery utilisation rates this year.

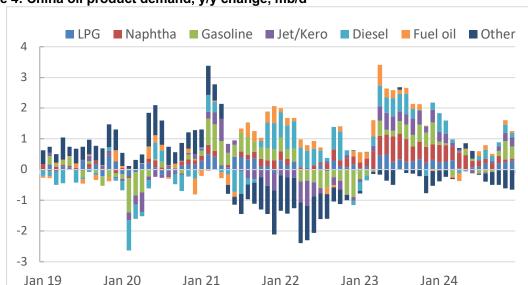


Figure 4: China oil product demand, y/y change, mb/d

Source: IEA, NBS, Customs, OIES

6. Upside for gas demand

The challenges that lie ahead for oil are opportunities for LNG. In transport, gas has made inroads in 2023 and as long as prices remain soft, it is likely to make additional gains this year. But the big sources of demand are industry and power, both of which are set to receive a boost from the government's industrial development and decarbonisation plans. Lower spot LNG prices combined with industrial activity and the above mentioned policies could lead to even higher demand.

Gas in power is also set to grow this year by 5 bcm according to CNPC. China currently has 30GW of new gas-fired capacity planned for 2024-2025 (most of which is planned for 2024) with an additional 40GW under construction, with unclear start dates. In the context of low gas prices, however, there are incentives to accelerate their construction. While gas in power competes with both coal and renewables, new additions and low spot prices could favour gas this year.



At the same time, even as pipeline flows increase with a new agreement from Kazakhstan running till 2026 and Power of Siberia 1 continuing to ramp up, buyers could reduce their pipeline takes and opt for cheaper spot cargoes over the coming months. The rise of spot purchases and PipeChina's efforts to increase transparency on its infrastructure will be important drivers of market activity this year.

■ Production ■ Pipeline Imports ■ LNG Imports Ω

Figure 5: China gas supplies, bcm

Source: NBS, NDRC, Customs, Nexant WGM, OIES

7. The carbon market: record high prices and eyeing expansion in 2024

But could rising carbon prices in China impact gas in power or coal-fired gas plants? The short answer is no. China's national carbon market finished its second compliance cycle on 31 December 2023, growing from a 4.5 billion tonnes CO2 per year market to a 5.1 billion tonnes per year market according to the Ministry of Ecology and Environment (MEE). The much-anticipated national ETS regulation has been adopted by the State Council and will come into effect 1 May. This change has lifted the ETS rules in the legislative hierarchy and also increased the penalty for misconduct and non-compliance in the carbon market¹⁵.

The Chinese carbon price hit a new record, increasing significantly during 2023 from RMB 50/t to 80/t, and then hit new record of RMB 85.95/t on 13 March this year. This is partly due to buying driven by strengthened oversight of the carbon market and stricter penalties in the new ETS regulation as non-compliance could be applied retrospectively.

Despite the elevated price level, however, China's carbon market is unlikely to have noticeable impacts on coal- and gas-fired power plants' operations in China in the near term. This is because allowances are handed out for free and the benchmark used in the ETS is still generous. Large power generators still have surplus allowances on their accounts from the previous years to draw on. While in 2024 the main focus for the ETS will be improving practical operations, it is also expected to expand its coverage to additional industries, namely aluminium and cement. This aspect is mentioned in the Government Work Report too, meaning this is a key task for the MEE. Yet since these two industrial sectors will only conduct simulated trading at the beginning, the impacts on the market from the inclusion of additional sectors will be muted. Moreover, the Two Sessions also emphasized the establishment of a carbon footprint system, improving carbon accounting capabilities, and establishing over time a carbon budget management system at the provincial and municipal levels. Their market impact is therefore limited in

¹⁵ Michal Meidan, Anders Hove, Yan Qin, "China's policy pendulum shifts back toward environmental protection, but will bureaucracy get in the way?", OIES Comment, February 2024, https://www.oxfordenergy.org/wpcms/wpcontent/uploads/2024/02/Chinas-policy-pendulum-shifts-back-toward-environmental-protection.pdf



the near term, and for now decision makers in Beijing are treating carbon management as an accounting exercise rather than an emissions reduction tool, but at least the accounting system is being put in place.

Conclusion

This year's Work Report is very consistent with last year's in that it offers quite ambitious macroeconomic targets with limited indications about how to get there. And with limited prospects of a stimulus or "revenge spending", it has left the market quite bearish. The central government has few new levers to pull so it will likely continue with modest targeted stimulus, going all in on the "Three New Industries" and broader efforts to upgrade the country's industrial base. But that is not necessarily a bearish outcome for energy markets. Clearly, there are risks to this growth trajectory from local government debt, external demand weakening or duties being imposed. Meanwhile, status quo language on energy and environmental targets favours growth, but there is room for change if the elusive third plenum delivers new ideas. At the same time, urging local officials to refrain from measures that might harm the economy leaves them potentially stuck in limbo and heading toward steep adjustments in 2025.